IN THE U.S. DISTRICT COURT
FOR THE WESTERN DISTRICT OF
PENNSYLVANIA

* * * * * * * *

THOMAS POWER,

Plaintiff * Case No.

vs. * 2:17-CV-00154-MRH

HEWLETT-PACKARD *

COMPANY, *

Defendant *

CONFIDENTIAL DEPOSITION OF DAVID PIPHO

NOVEMBER 26, 2018

ORIGINAL

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CONFIDENTIAL DEPOSITION ΟF DAVID PIPHO, taken on behalf of the Plaintiff herein, pursuant to the Rules of Civil Procedure, taken before me, the undersigned, Lacey C. Scott, a Court Reporter and Notary Public in and for the Commonwealth of Pennsylvania, at the Law Offices of Friday and Cox, 1405 McFarland Road, Pittsburgh, Pennsylvania, on Tuesday, November 26, 2018, beginning at 10:05 a.m.

```
3
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22
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24
25
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	1	4 T. N. D. E. W.
	2	INDEX
	3	WITNESS: DAVID PIPHO
	4	EXAMINATION
	5	By Attorney Licata 7 - 124
	6	DISCUSION AMONG PARTIES 124 - 125
	7	
	8	CERTIFICATE 126
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	

				5
1	·		EXHIBIT PAGE	
2				
3				PAGE
4	NUMBER		DESCRIPTION	IDENTIFIED
5	Number	1	HIPRO Document	
6			Bates HP002519	7 7
7	Number	2	Form No. DC-002EA	9 0
8	Number	3	Defendant's Answei	c s
9			to Plaintiff's	
10			Interrogatories	118
11	Number	4	Amended Notice of	
12			Deposition	118
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

```
6
 1
                    OBJECTION PAGE
 2
 3
      ATTORNEY
                                           PAGE
      Weiner 22, 23, 25, 28, 31, 33, 34,
 4
      61, 71, 72, 75, 76, 82, 83, 88, 102.
 5
      106, 107, 108, 110, 111, 115, 117
 6
 7
 8
9
      Betke 40, 113
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
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7 1 STIPULATION 2 3 (It is hereby stipulated and agreed by 4 and between counsel for the respective 5 parties that reading, signing, 6 sealing, certification and filing are 7 not waived.) 8 9 PROCEEDINGS 10 11 DAVID PIPHO, 12 CALLED AS A WITNESS IN THE FOLLOWING 13 PROCEEDING, AND HAVING FIRST BEEN DULY 14 SWORN, TESTIFIED AND SAID AS FOLLOWS: 15 16 EXAMINATION 17 18 BY ATTORNEY LICATA: 19 Good morning. Can you state Q. 20 your full name for the record, please? 21 Α. David Alan Pipho. 22 Mr. Pipho, have you ever had Q. 23 your deposition taken before? 24 Α. No. 25 Q. Okay.

8 1 So because we're on a video 2 conference, it is imperative that we 3 don't speak over each other. And it 4 is also very important that if you 5 don't understand or can't hear what 6 I'm saying you let me know. Or if you 7 need me to rephrase a question, please 8 ask me and I'll do my best. 9 It is also important that you 10 answer verbally, yes, no, I don't know 11 as opposed to a head nod or uh-huh or 12 uh-uh, because it would be very difficult for the reporter to take 13 14 that down. 15 Also, just try to let me finish 16 asking my question and I will do the 17 same for you. I will let you finish 18 answering the question. 19 Other than that, what is your 20 current address? 21 My personal address or my work 22 address? 23 Q. Personal? 24 Α. 14111 Timbergreen Drive, 25 Magnolia, Texas, 77355.

```
9
 1
             And how long have you been
 2
      that address?
 3
      Α.
             About ten years.
 4
             Have you lived in --- how long
      Q.
 5
      have you lived in Texas?
 6
             Pretty much my whole life,
      except for four years which I lived in
8
      Colorado.
9
             And do you live with anyone?
10
             I am sorry. You broke up a
11
      little bit. Could you repeat the
12
      question?
13
                   Do you live with anyone?
      Q.
             Sure.
14
      Α.
             Yes.
15
      Q.
             Who do you live with?
16
      Α.
             My wife and five children.
17
      Q.
             What is your wife's name?
18
      Α.
             Tammy.
19
      Q.
             I'm sorry.
20
             Can you repeat her first name?
21
      Α.
             It's Tammy, T-A-M-M-Y.
22
      Q.
             Is your wife employed?
23
      Α.
             Yes.
2.4
      Q.
             Does she work at HP?
25
      Α.
             No.
```

```
10
 1
             Does she work in the IT
 2
      industry?
 3
      Α.
             No.
 4
             Did you --- where did you
 5
      attend high school?
 6
             Concordia Lutheran High School
 7
      in Tomball, Texas.
 8
      Q.
             What years did you attend high
9
      school?
10
             Between, I guess, '87 to '91.
      Α.
11
      0.
             Did you graduate?
12
      Α.
             Yes.
13
      0.
             Did you attend college?
14
      Α.
             I attended technical college.
15
      Q.
             What was the name of that?
16
             DeVry Institute of Technology.
      Α.
17
      Q.
             When did you attend DeVry
18
      Institute of Technology?
19
      Α.
             '90 --- approximately '91 to
20
      \93.
21
      Q.
             So you went to DeVry right
22
      after graduating high school?
23
      Α.
             Yes.
24
             What did you study at DeVry?
      Q.
25
      Α.
             Electronics.
```

```
11
 1
            Any specialty within that
 2
      field?
 3
             No specialty. I have an
 4
      Associate's of Applied Science in
 5
      Electronics.
 6
             How many years was that
7
      program?
8
             Two years.
      Α.
9
      Q.
             And you graduated from that
10
      program?
11
      Α.
            Yes.
12
             Did you have any honors, awards
13
         distinctions while at DeVry?
14
      Α.
             No.
15
      0.
            Did you have any education
16
      after DeVry?
17
            No --- only education on the
      Α.
18
      job.
19
             What was your first job after
      Q.
20
      you graduated from DeVry?
21
             First job after graduation
22
      would have been at a company that
23
      makes surveillance systems, Advanced
      Surveillance Technologies.
24
25
      Q.
            And what was your job title at
```

```
12
1
      Advanced Surveillance Technologies?
 2
             Electrical technician.
 3
      Q.
             What did you do as an
 4
      electrical technician?
5
      Α.
             I assembled and installed
6
      camera surveillance systems.
7
             Were these surveillance systems
8
      like ones you would find on a building
9
      or were they built into an electronic
10
      device?
11
             Can you just kind of elaborate
12
      on that?
13
             They were custom surveillance
14
      systems in city environments as well
15
      a s
         transit bus environments.
16
      Q.
             How long were you in that job?
17
      Α.
             About --- less than a year.
18
             Did you say less than a year or
      Q .
19
      you
          left in a year?
20
      Α.
             Less than one year.
21
      Ο.
             Okay.
22
             What was your next job after
23
      that?
24
      Α.
             HP --- I'm sorry. At the time,
25
      Compaq Computer Corporation.
```

```
13
 1
            And what was your job title
      Ο.
 2
      when you first worked for Compaq
 3
      Computer Corporation?
 4
      Α.
            It would have been electrical
      technician.
 5
 6
             What were your job duties as an
7
      electrical technician for Compaq?
8
            Debug boards for repair
9
      purposes.
10
      Ο.
            How long were you an electrical
11
      technician for Compaq?
12
             I was in that particular
13
      position for about six years before I
14
      moved to a different position in a
15
      group that made tools to support the
16
      debug efforts.
17
         A different position within
18
      Compaq?
19
      Α.
            Correct.
20
            What was your job title in that
21
      next position?
22
            It would have been advanced
      Α.
23
      electrical technician.
2.4
            And how did your job duties
25
      differ from when you were an
```

```
14
 1
      electrical technician as opposed to
 2
      advanced electrical technician?
 3
             Rather than being responsible
      Α.
 4
      for repairing mother boards, I was
 5
      responsible for creating tools
 6
      other technicians to do the board
 7
      repair.
8
            And when you say create
9
      when you created tools, can you
10
      describe what you mean by tools?
11
            Primarily hardware tools.
12
      created interposer boards that would
13
      interface with the diagnostics, and
14
      then that diagnostic would run on a
15
      --- on a board and give us better
16
      insight into what was wrong with it at
17
      the time.
18
            And you worked with a team in
19
      that position?
20
            I'm sorry. You broke up.
21
      Could you repeat the question?
22
      Q.
            Sure. You said you worked with
23
      a team in that position?
24
      Α.
            That's correct.
25
            How many people were on your
      0.
```

```
15
1
      team?
 2
            I believe we had about six
 3
      people on that team comprised of three
 4
      technicians and three engineers.
5
            Were you the, for lack of a
6
      better term, the leader of that team
7
      or was someone else the leader of that
8
      team?
9
      Α.
            I was not the leader of the
1.0
            I was one of the three
      team.
11
      technicians. I was ---.
12
         How long were you in --- I'm
13
      sorry.
14
            I was one of the three
15
      technicians supporting the three
16
      engineers.
17
      Q.
          How long were you in that
18
      position?
19
      Α.
            About one year.
20
      Q.
            What was your next job after
21
      that?
22
            I moved to a different position
23
      within --- still at the time Compaq
24
      Computer Corporation in the notebook
25
      design organization in a team
```

```
16
 1
      responsible for notebook options.
 2
             Approximately what year was
 3
      that where you moved to notebook
 4
      design?
5
             It was --- let's see.
      Α.
                                      It was
6
      approximately 2001.
             What did you do in that
8
      position?
9
      Α.
             Supported testing and some
10
      design of various notebook options.
11
      Q.
             When you say notebook options,
12
          you describe what you mean by
13
      that?
14
      Α.
            Hard drive, optical drives,
15
      documentation, some primary options.
16
            During this time while you were
      Q.
17
      at Compaq, did they require that you
18
      undergo any type of education or
19
      training?
20
            Yes.
                   There was a significant
21
      amount of training for debugging
22
      purposes as well as electrical
23
     training.
24
      Q.
            Was that training onsite or did
25
      you go to another facility to get that
```

```
17
 1
      training?
 2
             At that time, the training was
      Α.
 3
      onsite.
 4
      0.
             Did you get any certifications
 5
      upon completing that training?
 6
      Α.
             Internal certifications.
 7
      0.
             Okay.
8
             What certifications, what
 9
      internal certifications, did you
10
      receive from that training?
             I don't recall the names of the
11
      Α.
12
      certifications.
13
      Q.
             Okay.
14
             So after the notebook design
15
      position, what was your next job?
16
             So that's around the time of
17
      the merger between Hewlett-Packard and
18
      Compaq. And shortly thereafter, I did
19
      move to a position in a team called
20
      TC, total customer experience,
21
      primarily supporting various customer
22
      escalations from an electrical,
23
      hardware, debug standpoint.
24
      Q.
            When did you go into that
25
      position?
```

```
18
 1
      Α.
             It was around 2002.
 2
               you have a Curriculum Vitae
      Q .
             Dο
 3
         a résumé of some kind?
 4
             I do not.
      Α.
 5
      Q.
             So how long were you in that
 6
      customer experience job?
7
             I have pretty much been in that
8
      job since that time. I have changed
9
      roles slightly, but I have been in the
10
      same organization until today.
11
            As we sit here today, what is
      Q.
12
      your job title?
13
             It's electrical hardware
14
      reliability engineer.
15
            And can you describe your job
16
      duties as an electrical hardware
17
      reliability engineer?
18
             So primarily I am involved in
19
      working, again, with customer
20
      escalation and identifying the root
21
      cause where they are driven from a
22
      hardware electrical failure
23
      standpoint, and driving the prevention
24
      into future development where it is
25
      appropriate.
```

```
19
 1
             How long were you in that job
      Q.
 2
      capacity?
 3
             I would say I have been in this
      Α.
 4
          the past six years or so.
 5
      Q.
             Are you a licensed engineer?
6
             I'm not, but my title is
 7
      engineer.
                 But I am not a licensed
8
      engineer.
9
            Do you have a supervisor in
10
      that job capacity?
11
      Α.
             I'm sorry. Did you ask if I
12
      have a supervisor?
13
      0.
             Yes.
14
             Yes, I do.
      Α.
15
      0.
             And who is that?
16
      Α.
             His name is Henry D. Lewis.
17
      Q.
             Can you spell that, please?
18
             H-E-N-R-Y, last name is
      Α.
19
      L-E-W-I-S.
20
             What is Mr. Lewis' job title?
      0.
21
      Α.
             Manager.
22
             Is there any other education,
23
      training or experience that we haven't
      touched on yet?
24
25
      Α.
             Not formal, primarily on the
```

```
20
1
      job.
2
            Do you --- at Compaq and now at
3
      Hewlett-Packard, did you have to do a
4
      certain amount of training per year or
5
      was it just for your position that you
6
      were going into?
7
             There were no requirements on a
8
      certain amount of training. It was
9
      just on the job as working through
10
      problems, things like that.
11
      Q.
            Do you have any specific
12
      training regarding the use of lithium
13
      ion batteries?
14
      Α.
            No.
15
            Did you review any documents in
16
      preparation for today's deposition?
17
      Α.
            Yes.
18
            What documents did you review,
19
      without disclosing anything that you
20
      may have discussed with your
21
      attorneys?
22
      Α.
            With the documents that were
23
      provided, I reviewed --- do you want
24
      the specific Bates stamp numbers for
25
      those documents?
```

	21
1	ATTORNEY LICATA:
2	Are those the ones that
3	I?
4	ATTORNEY WEINER:
5	David, are you referring
6	to the email that I sent you
7	last night that I received from
8	Plaintiff's counsel about the
9	exhibits that would be used for
10	the deposition today?
11	THE WITNESS:
12	Yes.
13	ATTORNEY WEINER:
14	Okay.
15	ATTORNEY LICATA:
16	Thanks.
17	THE WITNESS:
18	That was most recently
19	reviewed. I have skimmed
20	through the bulk of the
21	documents that are listed HP 1
22	through HP 5521.
23	BY ATTORNEY LICATA:
24	Q. Did you review a document that
25	is titled Amended Notice of Deposition

```
22
1
      pursuant to Fed.R.Civ.P. 30(b)(6)?
2
            I believe so. Yes, I did see
3
      that document.
4
            And you reviewed the 16 topics
5
      that are listed there?
6
         Yes, I did review the 16
7
      topics.
8
      Q. I'm sorry. Can you repeat
9
      that?
10
     A. Yes, I did review the 16
11
     topics.
12
            So I would just like to ask
13
      generally, how is a Hewlett-Packard
14
     battery pack identified?
15
                    ATTORNEY WEINER:
16
                    Objection to form. You
17
            can answer, David, if you
18
            understand the question.
19
                    THE WITNESS:
20
                    Could you please repeat
21
            the question again?
22
                    ATTORNEY LICATA:
23
                    Sure.
24
      BY ATTORNEY LICATA:
25
     Q.
            How is a Hewlett-Packard
```

23 1 battery pack identified? 2 ATTORNEY WEINER: 3 Continuing objection to 4 form. 5 THE WITNESS: 6 It is identified through 7 an HP labeling with an HP Logo, 8 a message that states to 9 replace with HP spares, a CT 10 label and tracking number that 11 is tracked in HP databases. 12 ATTORNEY LICATA: 13 Do the HP battery pack labels 14 have a certain sequence that they use 15 that you can determine that it is a 16 Hewlett-Packard product? 17 I'm not sure what you mean by 18 sequence. Do they have a particular 19 format? 20 0. Correct. 21 Α. Yes. And what is that format? 22 Q. 23 Again, it has an HP logo, a Α. 24 message that states replace with HP 25 spares, an HP cart number, an HP CT

```
24
1
      tracking serial number.
2
            What about the --- let's stick
3
      to lithium ion battery. Let me ask
4
      you this. What is a lithium ion
5
      battery?
6
            It is a device that stores a
7
      charge that is used to power a
8
      notebook computer during normal
9
      operation.
10
        Are there other types of
11
      batteries other than lithium ion
12
      batteries?
13
      Α.
            Yes.
14
      Q.
            What other types of batteries
15
      are there?
16
            Your question seems kind of
17
      broad. Are you asking what other
18
      types of batteries are used in HP
19
      notebook products or is the question
20
      something else?
21
      Q.
            Okay.
22
            Does HP use other types of
23
      batteries in their products --- let's
24
      limit it to their laptop products ---
25
      other than lithium ion batteries?
```

25 1 ATTORNEY WEINER: 2 Objection. The notice 3 is for the particular 8730 4 EliteBook model. So let's keep 5 our questions to that. That's 6 my objection. ATTORNEY LICATA: 7 8 Okay. 9 ATTORNEY BETKE: 10 With respect to this 11 product, go ahead. 12 THE WITNESS: 13 With respect to this 14 product, I'm not aware of any 15 other battery technology other 16 than the lithium ion that is 17 used. 18 BY ATTORNEY LICATA: 19 So when we're talking about the 20 battery pack, my understanding is that 21 there is almost like a plastic casing 22 and there are battery cells that are 23 inside that casing. 24 Is that correct? 25 That's correct. Α.

```
26
1
            And how can you identify or
      Q.
2
      do you identify whether the cells that
3
      are contained in that plastic casing
4
      are an HP product as opposed to
5
      another brand of product?
6
            The cells are identified
7
      through markings that are familiar
8
      based on the cells that was known to
9
      be qualified with that particular
10
      battery pack.
11
            Did you review any information
12
      regarding the battery that was at-
13
      issue in this case?
14
            I reviewed pictures of the
15
      at-issue battery.
16
            Can you tell me what type of
      0.
17
      battery it is?
18
      Α.
            No.
19
      Q.
            Did you review any information
20
      regarding the
                    laptop that was at-issue
21
      in this case?
22
      Α.
            I reviewed pictures.
23
         Can you identify the laptop
24
      that is at-issue in this case?
25
            Yes. Based on the markings and
      Α.
```

27 1 labels of the laptop, as well as the 2 serial number, we can identify it as 3 being an 8730W notebook computer. 4 And when that 8730W notebook Q. 5 computer is sold by Hewlett-Packard, 6 does it come with a Hewlett-Packard 7 battery pack? 8 Α. Yes. 9 Q. And what ---? 10 ATTORNEY BETKE: 11 Josh, excuse me for one 12 second. I just want to 13 clarify, because there might be 14 some misunderstanding. It is a 15 Hewlett-Packard approved pack, 16 but I don't want Josh to think 17 it is made by Hewlett-Packard. 18 So you may want to clarify 19 that. 20 The battery pack is not 21 made by Hewlett-Packard. He 22 said a Hewlett-Packard battery 23 pack. Do you see what I'm 24 saying? 25 THE WITNESS:

28 1 Yes. I apologize. 2 Clarifying my answer, it is 3 sold with an HP-approved 4 battery pack, but it is not 5 manufactured by HP. 6 BY ATTORNEY LICATA: 7 Who manufactures it? Q. 8 ATTORNEY WEINER: 9 Object to form. Are you 10 talking about this particular 11 at-issue ---? 12 ATTORNEY LICATA: 13 No, the battery pack 14 that he just identified, the HP 15 approved battery pack that 16 comes with the 8730W notebook 17 computer. 18 THE WITNESS: 19 So you are asking 20 specifically for the at-issue 21 laptop? 22 BY ATTORNEY LICATA: 23 Q. Well, are there multiple ---24 let me start with this. Go ahead. 25 ATTORNEY BETKE:

	29
1	Josh, the chargers are
2	just a nomenclature protocol.
3	Don't get caught up on this.
4	So if we're talking about the
5	artifact battery pack, which
6	would be the one that Mr. Power
7	had on his lap that day, let's
8	call it the artifact battery
9	pack.
10	And then if we're
11	talking about the one that
12	would have shipped with the
13	notebook computer that we
14	believe is at-issue, can we say
15	the one that was shipped with
16	the notebook at-issue? Does
17	that clarify that?
18	ATTORNEY LICATA:
19	Yes. So okay yes,
20	that's fine.
21	ATTORNEY BETKE:
22	Does that make sense to
23	you, David?
24	THE WITNESS:
25	Yes.

30 1 ATTORNEY BETKE: 2 Okay. 3 So let's try that. 4 BY ATTORNEY LICATA: 5 Q. Okay. 6 So who manufactures the battery 7 pack that is shipped with the at-issue 8 notebook computer? 9 Α. STL Technology. 10 0. Where are they located? 11 Α. They are physically --- the 12 plant that did the manufacturing, I'm 13 not aware. 14 And does STL Technology 15 manufacture all parts of the battery 16 pack that is shipped with the at-issue 17 notebook computer? 18 Α. No. 19 What parts of the battery pack 20 that is shipped with the at-issue 21 notebook computer does STL Technology 22 manufacture? 23 I am not 100-percent sure, but Α. 2.4 I know they do the final assembly as a 25 pack and they're responsible for the

31 1 design of the pack. 2 You said they design the pack? 3 Α. Correct, the battery pack 4 assembly. Who manufactures the cells that 5 Q. 6 come with the battery pack that is 7 shipped with the at-issue notebook 8 computer? 9 From the information we have, 10 Sony. 11 Are there any other manufacturers that are involved in 12 13 process of making the battery pack 14 that is shipped with the at-issue 15 notebook computer? 16 Α. There are component 17 manufacturers for the various 18 electrical components that are used in 19 the pack. 20 Could you identify them and 21 identify the component part which they 22 manufacture? 23 ATTORNEY WEINER: 24 Objection to form. Hold 25 on, David. Objection to form.

32 1 Are you referring to the 2 specific laptop that Mr. Power 3 had that day or in general the 4 8730? 5 ATTORNEY LICATA: 6 The battery pack that is 7 normally shipped with the 8 at-issue notebook computer. 9 BY ATTORNEY LICATA: 10 0. Can you identify those who 11 manufacture the other component parts 12 that you have not identified yet and 13 the component part that they 14 manufacture? 15 Not all of them, no. Α. 16 Can you do some of them? 17 PI makes the controller. 18 Beyond that, I'm not aware who all the 19 manufacturers were. 20 0. Did you say PI? 21 Α. Yes. 22 Q. What is the controller? 23 is that? 24 Α. The controller is what manages 25 the communication between the pack and

```
33
1
      notebook.
2
             Can the battery pack that is
3
      shipped with the at-issue notebook
4
      computer be used in other brands of
5
      laptops?
6
                     ATTORNEY BETKE:
7
                     You broke up all over
8
             the place with that one. Can
9
             you say that again?
10
                     ATTORNEY LICATA:
11
                     I'm sorry, Chris?
12
                     ATTORNEY WEINER:
13
                     He said you broke up.
14
                     ATTORNEY BETKE:
15
                     You broke up a little
16
             bit, too. Can you do your
17
             question again, please?
18
                     ATTORNEY LICATA:
19
                     Sure.
20
      BY ATTORNEY LICATA:
21
      Q.
             Can --- the battery pack that
22
        shipped with the at-issue notebook
23
      computer, can it be used with other
24
      brands of laptop computers?
25
                     ATTORNEY WEINER:
```

34 1 Object. It is beyond 2 the scope of ---3 THE WITNESS: 4 I can't speculate on 5 that. 6 ATTORNEY WEINER: 7 It is beyond the scope 8 of the notice anyway. 9 BY ATTORNEY LICATA: 10 How did HP determine that the 11 artifact battery used in this machine 12 at the time of the incident was not an 13 HP product? 14 So I think the initial and 15 obvious is based on the photographs. 16 The markings for the labels are not 17 The serial number listed is not a HP. 18 valid HP serial number. And the paper 19 label has no HP markings and is not 20 consistent with the format of HP 21 labels. 22 Who designs the battery that is 23 shipped with the at-issue notebook 24 computer? 25 ATTORNEY WEINER:

35 1 I'm going to object to 2 form, because I don't know if 3 you mean the pack or the cells? 4 ATTORNEY LICATA: 5 Well, if they're 6 different, then let me know, if 7 there's multiple parties that 8 design the different parts of 9 the battery that is normally 10 shipped with the at-issue 11 notebook computer. 12 ATTORNEY BETKE: 13 Okay. 14 I think we lost that 15 question. So if you don't 16 mind, Josh, can you please 17 repeat the question? 18 ATTORNEY LICATA: 19 Sure. 20 BY ATTORNEY LICATA: 21 Who designs the battery pack 22 that is shipped with the at-issue 23 notebook computer? 24 Α. The design and manufacturing of 25 the battery pack is owned by STL

```
36
1
      Technology.
2
            And do they also design the
3
      cells?
4
      Α.
             They do not design the cells.
5
      Q.
             Do you know who designs the
6
      cells?
7
      Α.
             It is my understanding that is
8
      Sony.
9
                     ATTORNEY BETKE:
10
                     Again, we're talking
11
             about with respect to the
12
             battery pack that was
                                     in the
13
             at-issue notebook when it was
14
             sold?
15
                     ATTORNEY LICATA:
16
                     Correct.
17
      BY ATTORNEY LICATA:
18
             For the battery pack that is
19
      sold with the at-issue notebook
20
      computer, who tests them?
21
                     ATTORNEY BETKE:
22
                     Are you talking about
23
             design or are you talking about
             manufacture or both?
24
25
                     ATTORNEY LICATA:
```

37 1 I mean, who tests them 2 once they're manufactured? 3 ATTORNEY BETKE: 4 Okay. 5 So I'm not trying to be 6 difficult, but I just want to 7 --- you know, you deal with 8 design, right, then it gets 9 tested. And then when it gets 10 to the manufacturing it gets 11 tested specifically ---12 basically it comes off the 13 assembly line, if you will. 14 ATTORNEY LICATA: 15 Correct. 16 ATTORNEY BETKE: 17 All right. 18 THE WITNESS: 19 So it is tested by the 20 battery pack manufacturer 21 themselves, STL Technology. 22 Again, to clarify, you 23 are talking about the specific 24 battery pack that was used in 25 the notebook. You are not

38 1 talking about how the design 2 was ---?3 ATTORNEY LICATA: 4 I'm talking about the 5 battery --- yeah. I'm talking 6 about the battery pack that was 7 normally shipped with the ---8 normally shipped with the 9 at-issue notebook computer. 10 That's what I'm talking about. 11 THE WITNESS: 12 And again, just to 13 clarify, you're talking about 14 the single physical pack that 15 was manufactured that shipped 16 with the at-issue notebook? 17 ВΥ ATTORNEY LICATA: 18 Correct, the completed product. Q. 19 So it would have been tested by 20 the pack manufacturer, in this case, 21 STL. And it would have been tested by 22 the notebook ODM, original design 23 Manufacturer, with their technology 24 --- I'm sorry. I apologize. It would 25 have been Inventec Corporation.

```
39
1
      0.
            What was that last company you
2
      said?
3
      Α.
             Inventec Corporation.
4
             So regarding the battery pack
      that's normally shipped with the
5
6
      at-issue notebook computer, does
7
      Hewlett-Packard have any role in
8
      testing of the battery pack at any
9
      stage of the process?
10
            Again, it is important to
      Α.
11
      clarify if you're talking about the
12
      single physical battery that was
13
      shipped with the at-issue notebook
14
      versus the validation of the design
15
      itself.
16
            The single battery?
      Q.
17
      Α.
            No.
18
            Do they have a role in testing
19
      the design of the battery pack that
20
      normally shipped with the at-issue
21
      notebook computer?
22
      Α.
            Their role is auditing the
23
      specification and monitoring the
24
      testing that is done by the battery
25
      manufacturer, the ODM, in this case,
```

40 1 Inventec Corporation, and the safety 2 testing that is also done by a third 3 party. 4 So how does Hewlett-Packard 5 monitor that process? 6 The design process is monitored 7 with a --- what we call a system team 8 that manages the process from 9 conception through prototyping until 10 it is released to manufacturing. 11 So does Hewlett-Packard have a 12 representative that is onsite where 13 these things --- where these battery 14 packs are being manufactured to 15 monitor this process? 16 Α. So you are asking if HP has a 17 representative onsite at the battery 18 manufacturer? 19 Yes, to do the monitoring that 20 you described. 21 ATTORNEY BETKE: 22 I'm going to object. 23 The monitoring --- I think 24 we're talking right now about 25 two different things.

41

monitoring he describes, or work he described, I should say, was in the design stage. You are now asking a question about the manufacturing stage. It is really important that we try to keep those two universes separate. You can ask about both as much as you want, Josh. I'm not trying to do that, but it has got to be clear when he is answering about design, he's answering about design, and when he is answering about manufacturing, he is answering about manufacturing. That's Otherwise, we're going to get way off ---.

ATTORNEY LICATA:

Absolutely. And please correct me. I mean, you know more about these batteries than I do. So if I'm not asking a question that you understand, just please ask me and I'll try

42 1 to do it again. 2 ATTORNEY BETKE: 3 Thank you. 4 think what threw us a 5 in --- the first part of curve 6 the question was fine, but then 7 you said as you just described, 8 and you had asked a 9 manufacturing question, but he 10 just described the design 11 testing process, if you will. 12 ATTORNEY LICATA: 13 Right. So let me ask it this Q. 14 way. 15 So HP monitors the design of 16 the battery pack that is normally 17 shipped with the at-issue notebook 18 computer. 19 Correct? 20 We monitor the qualification 21 process and results, yes, that's 22 correct. 23 Q. And who at Hewlett-Packard is 2.4 responsible for that? 25 Α. I don't have the name in front

```
43
1
      οf
        me.
2
            Ιs
               it a department?
3
            There's a team that is
      Α.
4
      responsible for the battery pack.
5
            And that's the system team you
6
      described earlier?
7
            The system team is responsible
8
      for the integration of the battery and
9
      other components into the notebook.
10
      There's a different team that is
11
      responsible for the battery packs and
12
      relationships with the battery pack
13
      suppliers.
14
            What is a positive temperature
15
      coefficient device?
16
            There's different ways to take
      Α.
17
             You can take it literally as a
18
      PTC fuse, a resettable fuse, or you
19
         take it generally as a device that
20
     monitors the temperature.
21
            And is the HP --- is the
22
     battery pack that is shipped with the
23
      at-issue notebook computer equipped
24
     with a PTC?
25
           You broke off at the end.
```

```
44
1
      Could you repeat the question?
2
      Q.
             Sure. Is the battery pack that
3
      is shipped with the at-issue notebook
4
      computer equipped with a PTC?
5
      Α.
            Yes.
6
            Where is this device located in
7
      the battery?
8
            I couldn't give you the exact
      Α.
9
      location. I don't know.
10
      Q.
            Can you just describe generally
11
      how the PTC works?
12
            So it would tell the battery
      Α.
13
      controller what the current
14
      temperature is of the cells, as well
15
      as that information would be
16
      communicated back to the notebook
17
      computer.
18
            So for the battery that is
19
      shipped with the at-issue notebook
20
      computer, is there just one PTC or are
21
      there multiple PTCs?
22
      Α.
            There are multiple.
23
      0.
            Is there a PTC --- for the
24
      battery that is shipped with the at-
25
      issue notebook computer, is there a
```

```
45
1
      PTC that is --- I'm sorry. Strike
2
      that.
3
            For the battery that is
4
      normally shipped with the at-issue
5
      notebook computer, is there one PTC
6
      per battery cell?
7
            I am not sure.
            Do you know how many PTCs there
8
9
      are for the battery that is shipped
10
      with the at-issue notebook computer?
11
            I do not.
      Α.
12
      Q.
            For the battery that is shipped
13
      with the notebook computer, where is
14
      the current flow path?
15
            You are asking what is the
16
      current flow path?
17
            Well, I was asking where --- I
      Q.
18
         asking where, but if you want to
19
      describe what it is, too, that's fine?
20
            In general, the current flow
21
      path would be from the devices that
22
      are drawing power within the notebook
23
      through the interconnect to the
24
      battery through the discharge. That's
25
      the path itself. Beyond that, it
```

```
46
1
      would be too complicated to fully
2
      describe.
3
            So that was --- what you
      Q.
4
      described was just in general?
            Yes.
5
      Α.
6
            For the battery that is shipped
7
      with the at-issue notebook, are these
8
      PTCs internal to the batteries
9
      themselves?
10
            When you say internal to the
11
      battery, are you asking if it is
12
      internal to the battery pack or
13
      internal to the battery cell?
14
            Let's start with cells.
15
            I'm not aware of any internal
16
      cells. I know there are some external
17
      to the cell.
18
            When you examined the
19
      photographs and everything else you
20
      looked at for the artifact battery
21
      pack, did you find any of these PTCs?
22
            I don't see any in the
23
      pictures.
24
            For the battery shipped with
25
      the at-issue notebook, does it come
```

```
47
 1
      equipped with a current interrupt
 2
      device?
 3
      Α.
            Yes.
 4
            And what is a current interrupt
5
      device?
6
            The battery pack controller is
7
      responsible for monitoring the current
8
      that is either going in or coming out
9
      of the battery pack and charged or
10
      discharged. So it would be in that
11
      respect --- the current interrupt
12
      device would be a combination of the
13
      battery controller and the charge and
14
      discharge fail.
15
            So in the battery that is
16
      shipped with the at-issue notebook,
17
      where is this device located?
            Located on a small PCB board
18
      Α.
19
      inside of the battery pack case.
20
            For the battery that is shipped
21
      with the at-issue notebook, are all
22
      the cells within the battery pack
23
      protected by a single current
24
      interrupt device or are there multiple
25
      current interrupt devices?
```

48 1 Α. There is a single and there may 2 be more that I'm not aware of. 3 ATTORNEY BETKE: 4 Is there a design 5 document or ---? 6 THE WITNESS: 7 There are design 8 documents that fully describe 9 that specification and behavior 10 of that battery pack. 11 ATTORNEY BETKE: 12 If you want to ever look 13 at one of those, Josh is not 14 limiting you. It is not 15 memory test. If there's 16 design document that would help 17 you, you can go ahead and look 18 at it. 19 THE WITNESS: 20 If you need 21 clarification, I would need to 22 look through some of the 23 battery specs for the notebook. 24 BY ATTORNEY LICATA: 25 0. Do you have Bates stamp

	49
1	HP003116 or 3115 and 3116?
2	ATTORNEY BETKE:
3	03115 and 3116?
4	ATTORNEY LICATA:
5	Correct.
6	ATTORNEY BETKE:
7	Give us one second.
8	ATTORNEY LICATA:
9	0 k a y .
10	ATTORNEY BETKE:
11	Just so we're on the
12	same page, the document 3115
13	has on top of it the number two
14	and it says specification?
15	ATTORNEY LICATA:
16	Correct.
17	ATTORNEY BETKE:
18	Then the next page says
19	rating?
20	ATTORNEY LICATA:
21	Correct.
22	ATTORNEY BETKE:
23	By the way, while we're
24	doing this, probably make a
25	note that the HP side of this

50 1 designating this deposition 2 as confidential under 3 protective order. I probably should have said that before, 4 5 but I think we can do 6 protective both during and 7 So let me just do it 8 now while we're talking about 9 proprietary material. 10 ATTORNEY WEINER: 11 The Confidentiality 12 Order entered by Judge Hornack 13 specifies that and it's all 14 being produced within the 15 confines of that Order, so 16 we're --- everything is good to 17 qo. 18 ATTORNEY BETKE: 19 Great. Thank you, guys. 20 BY ATTORNEY LICATA: 21 Q. So when --- you indicated that 22 you would need to look at the specs of 23 the battery in order to determine 24 which battery cells are being --- or 25 I'm sorry, how many of these current

51 1 interrupt devices there are for this 2 particular battery pack. 3 And my question is, is this 4 what you are referring to? 5 Α. No. 6 Well, for the battery shipped 7 with the at-issue notebook, what are 8 the specs for that battery? 9 Α. Let me find that. 10 ATTORNEY WEINER: 11 While David is looking 12 through, if you want to put 13 the beginning or end, it 14 doesn't really matter, that 15 counsel have agreed to 16 reservation of objections other 17 than form until the time of 18 trial or motion. 19 ATTORNEY LICATA: 20 That's correct. 21 ATTORNEY BETKE: 22 You just apparently said 23 some things breaking up on 24 our end. If you care to repeat 25 them so we know what you are

```
52
1
             saying, I would appreciate it.
2
                    ATTORNEY WEINER:
3
                     I'm sorry, Chris.
4
             was directed to the court
5
             reporter. I was just having it
6
             noted in the transcript that
7
             counsel have agreed to reserve
8
             all objections other than those
9
             to the form of the question for
10
             the time of trial or by motion.
11
                    ATTORNEY BETKE:
12
                    Okay.
13
                    Great. Thank you.
14
                    We forgot about the
15
             court reporter. We can just
16
             see one eye ---.
17
18
     (WHEREUPON, AN OFF RECORD DISCUSSION
19
     WAS HELD.)
20
21
                    THE WITNESS:
22
                    So the schematic for the
23
             battery pack is Bates stamped
24
             HP003036.
25
      BY ATTORNEY LICATA:
```

53 1 Q . Okay. 2 ATTORNEY BETKE: 3 Josh, does that answer 4 your question? 5 ATTORNEY LICATA: 6 Yeah. I mean, if that's 7 the specs. I was looking ---8 I'll just continue on. But 9 yes, it does. 10 ATTORNEY BETKE: 11 He pointed to the 12 schematic. I mean, I suspect 13 the spec as a whole is longer 14 than one page, but you were 15 talking about the specific 16 schematic that would provide 17 the information you were 18 talking about. Right? Do I 19 have that right or am I 20 do I have that right? 21 BY ATTORNEY LICATA: 22 What I'm getting at --- and 23 I'll just continue. What I'm getting 24 at is for the battery that is shipped 25 with the at-issue notebook, what is

	54
1	considered the maximum charge?
2	A. Maximum charge what?
3	Q. Voltage? I believe it is 17
4	volts, but I would have to look at the
5	specification. Yes, the maximum
6	charge voltage is 17 volts.
7	Q. And what is the maximum charge
8	current?
9	A. 3.8 amps or 3800 milliamps.
10	Q. Can you describe the difference
11	between for the battery pack that
12	is sold with the at-issue notebook,
13	looking at the specifications, can you
14	describe the difference between
15	nominal voltage and rated charge
16	voltage?
17	<u>ATTORNEY WEINER</u> :
18	Do you want to refer him
19	to what page you are looking
20	at?
21	<u>ATTORNEY LICATA</u> :
22	Yes. I'm looking at
23	3116. I mean, that's what I'm
24	look at but
25	THE WITNESS:

55 Yeah, I'm not sure. 1 2 ATTORNEY BETKE: 3 Josh, David is here on a 4 broader category. Can we try 5 to produce somebody who knows 6 something about everything, so 7 he is not --- he knows about batteries, but he is not on the 8 9 battery team. We have someone 10 who has a cross section of 11 knowledge to make it easier for 12 you, but I just want you to 13 know that. 14 ATTORNEY LICATA: 15 No. I understand. 16 ATTORNEY BETKE: 17 You know how that is. 18 You got 16 categories. You 19 can't --- you can try to get 20 someone who can answer 21 questions about everything. 22 ATTORNEY LICATA: 23 Correct. 24 ATTORNEY BETKE: 25 You might not be the

56 1 expert on the specific topic. 2 ATTORNEY LICATA: 3 I understand. Т 4 appreciate it. 5 BY ATTORNEY LICATA: 6 So I'm going to switch gears a 7 little bit here. Did you review any 8 photographs, information regarding the 9 charger that was used by Mr. Power 10 during this incident? 11 I believe there was a photo 12 that was provided. 13 ATTORNEY BETKE: 14 I don't believe there's 15 one --- I was going to say just 16 so you know what is going on, 17 Josh, he is looking at a list 18 of the documents. I don't have 19 a recollection of there being a 20 photograph of the artifact in 21 the production. I think it 22 would have been taken by the 23 expert through you guys 24 separately. 25 So while he is looking

```
57
 1
             for that, I don't want him
 2
             spending time looking for that
 3
             if you --- because I don't
 4
             believe it is in there.
 5
             you?
 6
                    ATTORNEY LICATA:
 7
                    I don't remember seeing
8
             it, but ---?
9
                    ATTORNEY BETKE:
10
                    I don't think it's in
11
             there. And I think the
12
             photograph he's looking at, I
13
             don't think it is there.
14
      BY ATTORNEY LICATA:
15
             Did you by chance review HP'S
16
      Answers to Plaintiff's
17
      Interrogatories?
18
      Α.
            Yes.
19
             So it is stated several times,
20
      but I'm looking at question six.
21
      Α.
            Okay.
22
            And if you go down, it is about
23
      halfway down. There's a sentence that
24
      reads, the Defendant does not know
25
      whether the artifact adapter is
```

```
58
 1
      original to the power notebook.
                                          Dο
 2
      you see that?
 3
             Okay.
 4
             I see it.
 5
      Q.
             My question is what
 6
      investigation did you do to determine
7
      whether that adapter was original to
8
      the laptop?
9
             I was not involved in that
10
      investigation.
11
          So for this portion, like we
      did before, I know you guys referred
12
13
        it in your Interrogatories as the
14
      artifact adapter. So I will use that
15
      term to describe the adapter that Mr.
16
      Power was using at the time. Do you
17
      know the make and model of the
18
      artifact adapter?
19
      Α.
            I do not.
20
                    ATTORNEY BETKE:
21
                    Josh, I don't want to be
22
            impolite here. Unlike the
23
            battery pack you were saying
24
            original, this is saying
25
            unknown ---
```

59 1 ATTORNEY LICATA: 2 Right. 3 ATTORNEY BETKE: 4 --- category, so just s o 5 you --- if you want to ask 6 shipped with, he can answer 7 that question. It could be 8 that we're not saying it is 9 not, we're saying we don't 10 know. 11 ATTORNEY LICATA: 12 I would clarify that for 13 the record. When I say 14 artifact adapter, that is not 15 to say --- when we say artifact 16 battery pack, it is unknown 17 this time whether the adapter 18 was original to the at-issue 19 laptop. 20 BY ATTORNEY LICATA: 21 What is the make and model of Q. 22 the adapter that would be shipped with 2.3 the at-issue notebook? 24 Α. It is a HIPRO 120-watt adapter. 25 0. So some of the documents were

```
60
      produced --- and I'm looking at Bates
 1
 2
      stamp HP002544 through HP002560.
 3
                     ATTORNEY BETKE:
 4
                     Can you give us the
5
             numbers again?
 6
                     ATTORNEY LICATA:
7
                     2544 through 2560.
8
                     ATTORNEY BETKE:
9
                     2544 --- give him one
10
      second to flip through it here.
11
                     ATTORNEY LICATA:
12
                     Sure.
13
                     ATTORNEY BETKE:
1.4
                     Familiarized.
15
      BY ATTORNEY LICATA:
16
             Do you recognize what these 16
17
      pages of documents are?
18
            Safety certification report.
19
             And are --- these safety
20
      certifications, are they all for the
21
      same product?
22
             When you say, are they all for
      Α.
23
      the same product, you mean are they
24
      all for the same adapter?
25
          Correct.
      Q.
```

```
61
 1
             I'm not sure, but it appears
 2
      that there are multiple model numbers
 3
 4
             Okay.
      Q.
 5
      Α.
             --- in the documentation.
 6
      Q.
             Are any of the model numbers
7
      within the 16 pages the model number
8
      of the adapter that would be sold with
9
      the at-issue notebook computer?
10
      Α.
             Yes.
11
             Which one is that?
      0.
12
      Α.
             Yeah, I'm not sure.
13
      Q.
             Just so I'm clear, out of these
14
        pages, we're not sure whether any
15
      of these documents refer to the
16
      adapter that would be sold with the
17
      at-issue notebook?
18
                     ATTORNEY WEINER:
19
                     Objection to form.
                                          You
20
             can answer it.
21
                     THE WITNESS:
22
                     You mean adapter?
                                          I ' m
23
             sorry.
24
                     ATTORNEY BETKE:
25
                     I'm sorry. I may have
```

t

--- did you say adapter that would have been sold with the at-issue notebook?

ATTORNEY LICATA:

No. I said --- I just wanted to be clear that out of the 16 pages that I asked the witness to refer to, he is not sure if any of these refer to the adapter that would be sold with the at-issue notebook computer.

ATTORNEY BETKE:

All right. I believe he said he could not match the model number, could not give you the model number, but go ahead.

THE WITNESS:

That's correct. I

cannot --- with the information

that's provided in the shipping

records, it is not possible to

match the exact model that was

certified.

_ .

63 1 BY ATTORNEY LICATA: 2 Is there another way that you 3 could match up the information that's 4 contained in these documents to the 5 adapter that would be sold with the at-issue notebook computer? 6 7 It may be possible to research 8 the adapter shipped with the at-issue 9 notebook via CTP commodity tracking 10 number to get that level of detail. 11 Q. For the adapter that would be 12 sold with the at-issue notebook, do 13 you know what the rating is? 14 So you broke up on the first 15 part of your question. Could you ask 16 that again, please? 17 Sure. For the adapter that 0. 18 would be sold with the at-issue 19 notebook computer, do you know what 20 the rating would be? 21 Α. The power rating is 120 watts. 22 Q. Okay. 23 We'll do the same question but 24 the same question, but what about 25 the amps? It is not listed

64 1 specifically? 2 ATTORNEY BETKE: 3 If you don't know, just 4 say you don't know. 5 THE WITNESS: 6 Not listed in the 7 information on the at-issue notebook, so I can't be sure. 8 9 BY ATTORNEY LICATA: 10 0. What about the volts? 11 Α. Again, the specific model is 12 listed, and so we can't be 100 13 percent sure. The typical voltage is 14 19.5 volts. 15 However, there are some slight 16 differences by adapter model. 17 Ο. So by the way, just because I'm 18 starting to go through documents --- I 19 didn't tell you this before. If you 20 want to take a break or anything, let 21 me know. If you want to talk to your 22 attorney, you just let me know. 23 ATTORNEY BETKE: 24 Yeah. I think it might 25 make sense --- if this is a

```
65
1
             good time, he has been going at
 2
             it about an hour and a half
 3
             now. It's probably a good idea
 4
             to take a little bathroom break
5
             and get some coffee in here ---
6
             get some coffee and bring it
7
             back in here, and you know,
             just clear our heads for a
8
9
             moment.
10
                    ATTORNEY LICATA:
11
                    Okay.
12
                    Let's take a break.
13
                    ATTORNEY BETKE:
14
                    Let's take a five or
15
             seven minute break or something
16
             like that. Okay?
17
                    ATTORNEY LICATA:
18
                    Sounds good.
19
2.0
      (WHEREUPON, A SHORT BREAK WAS TAKEN.)
21
22
      (WHEREUPON, COURT REPORTER READS BACK
23
      PREVIOUS QUESTION.)
24
25
      BY ATTORNEY LICATA:
```

```
66
1
      Q.
             All right.
 2
             I would like to direct your
 3
      attention to Bates stamp HP002519?
 4
      Α.
             Did you say 800?
5
      Q.
             No, just 002519.
6
      Α.
             Okay.
7
      Q.
             Do you recognize what is
8
      depicted here?
9
             What I show is a page of
10
      HIPRO specification showing the
      mechanical dimension of the output
11
12
      cable.
13
      0.
             And I think I know the answer
14
      to this question because we went over
15
      this, but can you tell if this diagram
16
      is a diagram of the adapter that would
17
      be sold with the at-issue notebook
18
      computer?
19
            Just to clarify what you're
20
      asking, is this diagram of the adapter
21
      that should have shipped with the
22
      at-issue notebook?
23
      Q.
            Correct.
24
      Α.
             Yes.
25
      Q .
             So looking at the diagram on
```

```
67
 1
          left-most portion of the page,
      the
 2
      you see where it has pin one, pin two
 3
      and pin three?
 4
             Yes.
      Α.
 5
             What is the --- what are the
      0.
 6
      purpose of those pins?
 7
             There's three pins for power,
8
      ground and what is called adapter ID.
9
            Using the diagram, can you
      Q.
10
      identify which pin is power, which pin
11
      is ground and which pin is adapter ID?
12
      Α.
            From this diagram, it looks
13
      like pin one is the adapter ID, pin
14
      two would be power, pin three would be
15
      ground.
16
            And what is the purpose of each
      0.
17
      οf
        these pins?
18
      Α.
            The purpose of power and ground
19
        to deliver and complete the current
      is
20
      path from --- of DC power from the
21
      adapter into the notebook computer.
22
      The ID pin is used to identify the
23
      available wattage of the AC adapter as
24
      well as to regulate current and
25
      throttling in the notebook.
```

68 1 Are any of these pins 2 considered a smart pin? 3 The ID pin could be considered Α. 4 a smart pin. 5 Could you define for me what 6 you consider to be a smart pin? 7 The ID pin that I previously described that identifies the 8 9 available wattage of the adapter, 10 well as is used as a signal to 11 regulate current and throttling inside 12 the notebook. 13 Q. Okay. 14 And focusing on the adapter ID 15 pin, pin one in the diagram, what 16 that pin made of as far as material? 17 Α. The pin is made of an internal 18 base metal of copper and may have 19 different plating types. I'm not 2.0 it is listed in the specification 21 or not what protective plating they 22 used. 23 Q. And can --- this pin, pin one 24 the diagram, can it bend? 25 Α. I am not sure I understand the

```
69
1
      question.
2
            Can --- pin one, which is
3
      depicted in the diagram that we're
4
      looking at now, can it move from ---
5
      can it be moved from its original
6
      position to where it was manufactured?
7
               is not designed to be moved.
             Ιt
8
               I guess my question is,
             So
9
      understand it is not designed to be
10
      moved, but can it be moved?
11
            So you are asking if someone
12
      were to take an object and insert it
13
      into the adapter barrel and exhibit
      some amount of force, could it be
14
15
      moved? Is that what you're asking?
16
      Q.
            Yes.
17
            I suppose that could be
18
      possible.
19
      Q.
            Okay.
20
            Well, here is a personal
21
      example. What if someone like me, who
22
      I have done this before, has my
23
      computer plugged in, and I forget that
24
      it is plugged in. And I take my
25
      computer off the table, and it has the
```

```
70
      cord still attached to it. Would that
1
2
      bend that center pin there or could it
3
      bend that?
4
      Α.
             It should not. It should not,
5
      because the mechanical structure is
6
      maintained by the outer barrel.
7
             What would happen to the
8
      functionality of that pin if it were
9
      to become loose?
10
      Α.
            Become loose?
11
      Q.
            Correct.
12
      Α.
            You are asking what would
13
      happen to the functionality of the pin
14
      if it were to become loose or to
15
      become bent like you previously
16
      stated?
17
      0.
            Correct.
18
      Α.
             If it were no longer making
19
      contact with the adapter ID detect pin
20
      inside the notebook, then the notebook
21
      would display a message and default to
22
      a lower power state.
23
            When you say the notebook, are
24
      you talking about the at-issue
25
      notebook?
```

71 1 Α. Correct. 2 Can you describe what the 3 at-issue notebook's software would do 4 with the information gained from these 5 pins? 6 ATTORNEY BETKE: 7 Mike, can you object to 8 the form on that one? 9 ATTORNEY WEINER: 10 Yeah. I mean, I'll 11 object just in terms of the 12 what it would do part. Also, 13 there's no foundation for the 14 software question, but go 15 ahead. If you understand, 16 David, go ahead. 17 THE WITNESS: 18 Are you asking what it 19 normally does, the information 20 in the ID? 21 ATTORNEY BETKE: 22 In other words, not 23 setting aside the prior 24 questions about what would 25 happen in a unique

```
72
1
             circumstance, you are asking
2
             --- do you mean generally what
 3
             is it supposed to do or are you
 4
             still asking about what it
5
             would do if the thing was bent
6
             or loose?
7
                     ATTORNEY LICATA:
8
                     Let me back up. I'll
9
             back up.
10
                     THE WITNESS:
11
                     All right.
12
      BY ATTORNEY LICATA:
13
             You testified that the adapter
14
      ID pin, pin number one in the diagram,
15
      identified available wattage and
16
      regulated current and throttling.
17
             Correct?
18
      Α.
             Correct.
19
      Q.
             Okay.
20
             Does that pin interact with the
21
      software of the at-issue laptop?
22
                     ATTORNEY WEINER:
23
                     Object to the form.
24
                     THE WITNESS:
25
                     Yes.
```

73 1 BY ATTORNEY LICATA: 2 0. And how does it interact with 3 the software from the at-issue laptop? 4 There should be a warning Α. 5 message displayed if it does not 6 detect the ID pin stating that the 7 laptop may be used at lower power. 8 And it is my fault for not 9 being clear, but how does that pin 10 interact with the laptop software if 11 it is not damaged, if it is perfectly 12 normal the way it was manufactured and 13 designed? 14 Just to clarify, when you say software, I believe you are speaking 15 16 to the operating system on the 17 notebook? 18 0. Okay. 19 There's also firmware inside 20 the imbedded controller that could be 21 considered software. Which 22 specifically are you referring to? 23 Ο. I was referring more to the 2.4 laptop as a whole, but let's start 25 with the operating system.

74 1 The operating system would be 2 used solely for displaying of 3 messaging. If that ID pin were no 4 longer making contact for the system 5 a whole, the primary communication 6 is through --- let me get to the 7 document here. The communication would be 8 9 through a system signal, adapter 10 signal. 11 ATTORNEY BETKE: 12 Explain your answer. 13 THE WITNESS: 14 And I apologize. Could 15 you repeat your initial 16 question? 17 BY ATTORNEY LICATA: 18 0. Sure. So I was asking how the 19 information --- how that adapter 20 pin interacts with the laptop itself. 21 You indicated that there's multiple 22 systems, including an operating 23 system. And then you also said there 24 was a firmware. It operates with the 25 firmware.

75 1 So I quess my next question 2 would be how does it interact with the 3 firmware? 4 So the imbedded controller in Α. 5 the notebook would utilize the adapter 6 signal primarily to identify the wattage of the AC adapter, ensuring 8 that it is within the appropriate 9 range. That's for that particular 10 notebook design. 11 And real time, the same signal 12 would be used as the notebook 13 operating. It would regulate 14 throttling of the CPU to ensure that the notebook stays within the rating 15 16 of the adapter. 17 Q. Does the at-issue laptop permit 18 the batteries to be charged if the 19 power supply is not the correct size? 20 ATTORNEY BETKE: 21 Object to the form, 22 Mike, please. 23 ATTORNEY WEINER: 24 I'll object to the form. 25 I also object to the terms, the

76 1 size of --- what power 2 component are you referring to? 3 ATTORNEY LICATA: 4 Okay. 5 BY ATTORNEY LICATA: 6 So will the at-issue notebook allow the batteries to be charged if 8 the power supply --- let's say the 9 output cable that is depicted in 10 figure one on HP 002159 is not the 11 correct size? 12 ATTORNEY WEINER: 13 Continuing objection to 14 form. Go ahead, David, if you understand. 15 16 THE WITNESS: 17 The depiction on HP 18 002519 is a mechanical drawing. 19 And so when you say the wrong 20 size, are you referring to the 21 wrong mechanical size? 22 BY ATTORNEY LICATA: 23 0. Sure. 24 If the connecter is the wrong Α. 25 mechanical size, and it is not to the

```
77
1
      specifications, I could not speculate
2
      as to what might occur.
3
      Q.
             All right.
4
                     ATTORNEY LICATA:
5
                     While we're on this,
6
             I'll mark this diagram we're
7
             talking about as Plaintiff's
8
             Exhibit 1.
9
10
                     (Whereupon, Deposition
11
                     Exhibit Number 1, HIPRO
12
                     Document Bates HP002519,
13
                     was marked for
14
                     identification.)
15
16
      BY ATTORNEY LICATA:
17
             I would like to take your
18
      attention back to the Interrogatories
19
      that we were referencing earlier.
20
      Α.
             Okay.
21
             I'm looking at question 14.
      Q.
22
      Α.
             Okay.
23
      0.
             So I'm looking, and it is a
24
      pretty large paragraph here, but I'm
25
      looking about nine lines down with the
```

```
78
1
      sentence that starts with in addition.
2
                     ATTORNEY BETKE:
3
                     You said number 14, nine
4
             lines down, starts with in
5
             addition?
6
                     ATTORNEY LICATA:
                     Correct.
8
                     THE WITNESS:
9
                     Okay.
10
      BY ATTORNEY LICATA:
11
             Would you mind reading that
12
      sentence, please?
13
             Go ahead.
14
                     ATTORNEY BETKE:
15
                     I think he wants you to
16
             read that --- did you want him
17
             to read it aloud or to himself?
18
      BY ATTORNEY LICATA:
19
      Q.
             Can you please read it aloud,
20
      please?
21
      Α.
             From in addition to what ---?
22
             To the end of the sentence,
23
      ves.
24
                     ATTORNEY BETKE:
25
                     In addition ---.
```

THE WITNESS:

In addition, computer software logic in both the EliteBook 8730w's CPU and in the battery pack which would have shipped with it monitor and control the battery charge and discharge processes to ensure these occur at safe temperatures and voltages.

BY ATTORNEY LICATA:

Q. Okay.

So my question is what type of computer software logic is contained in the battery pack that would have shipped with the at-issue notebook?

A. You cut off at the end, but I believe you are saying ---.

Q. I can repeat it. I can repeat it. My question is what type of computer software logic is contained in the battery pack that would have shipped with the at-issue notebook?

A. There is what is referred to as firmware that is programmed into the

80 1 battery controller that's inside the 2 battery pack. 3 Can you just describe what 4 exactly it is that this computer 5 software logic in the battery pack 6 that would have shipped with the 7 at-issue notebook does? 8 You broke up at the beginning. 9 Could you repeat? 10 ATTORNEY BETKE: 11 Josh, I don't know that 12 I'm trying to --- I can't 13 match your mouth movements with 14 your voice, but it looks like 15 you might be looking down at 16 certain times. And when you 17 look down, I think that's when 18 we lose you. I'm quessing, but 19 you might want to try if you 20 can as best you can to like 21 speak forward and we'll see how 22 that goes. 23 ATTORNEY LICATA: 24 Okay. 25 BY ATTORNEY LICATA:

81 1 So what type of computer 2 software --- sorry, I already asked 3 you that question. 4 Can you describe what the 5 computer software logic does that is contained in the battery pack that is 6 7 shipped with the at-issue notebook? 8 High level monitor battery 9 helps communicate with the notebook 1.0 computer and controls the necessary 11 regulation of charge and/or safety 12 aspects of the battery. 13 Can a user of the --- let's say 14 the same model as the at-issue 15 notebook. Can a user go on to their 16 laptop, on their screen and view this 17 information that this computer 18 software logic is interfacing with the 19 laptop? 20 And if that's a bad question, 21 let me know, but my question is can 22 the user see this information that is 23 being exchanged between the battery 24 pack and the laptop itself, the CPU? 25 ATTORNEY WEINER:

```
82
1
                     Objection to form.
2
                     THE WITNESS:
3
                     No.
 4
      BY ATTORNEY LICATA:
5
      0.
             Did you say no?
6
      Α.
             Not with the as-shipped
      condition and available software.
8
             For the at-issue notebook, is
9
      there an alarm or a warning on the
10
      screen that appears if a non-HP
11
      approved battery is being used?
12
             I'm not sure.
      Α.
13
                     ATTORNEY BETKE:
14
                     Josh, just to clarify,
15
             you are asking just simply if
16
             it is not approved, not
                                       i f
17
             somehow malfunctions or has
18
             some sort of --- trips
19
             something, like that?
                                     You are
20
             just saying literally if
                                        it
                                           is
21
             not an HP approved product?
22
                     ATTORNEY LICATA:
23
                     Correct.
24
                     THE WITNES:
25
                     I can't speculate on
```

83 1 what the non-approved battery 2 may do or how it may be ---. 3 BY ATTORNEY LICATA: 4 So I know --- forgive me, 5 because I am not near as computer 6 literate as you are, but I know if leave my iPhone out in the sun or use 8 it too long, it gives me a message 9 saying it is going to overheat or it 10 even shuts down. 11 My question is does the 12 at-issue notebook have a feature that 13 is similar to that where if 14 overheats that it will notify the user 15 or shut down? 16 ATTORNEY WEINER: 17 Objection to form. 18 THE WITNESS: 19 Yes, it does. 20 ATTORNEY LICATA: ВΥ 21 0. Can you describe that feature? 22 So at a high level, that is 23 described in the Answer to the 24 Interrogatory question 14. 25 summary, there's active control of the

84 1 CPU utilizing fan and throttling. 2 There are also secondary controls. Ιf 3 the CPU were to reach a temperature 4 above the active control, it will 5 a signal to the power supply that 6 would cut power to the notebook. 7 There are also additional 8 components, that even if the CPU 9 signal is not received, if the 10 temperature goes above a threshold, it 11 will also cut power to the notebook. 12 Q. Okay. 13 Ιs it possible for the user of 14 the at-issue notebook to monitor the 15 temperature of the battery? 16 I am not sure with the software 17 that was applied from the factory with 18 the at-issue notebook. 19 ATTORNEY BETKE: 20 The user would know 21 that, would they not? 22 THE WITNESS: 23 Let me make sure 24 understood the question you 25 asked. Can the user monitor

85 1 the battery temperature? 2 ATTORNEY LICATA: ВΥ 3 Yeah, from the laptop itself? Q . 4 ATTORNEY BETKE: 5 Are you asking, can they 6 take the temperature or are you asking if one of the safety 8 features wouldn't work, would 9 the user know that? 10 ATTORNEY LICATA: 11 0. What I'm asking is if the user 12 curious about how hot their 13 battery was, can they make a few clicks on the mouse and find that 14 15 information out from the screen of 16 their computer? 17 Α. There is a battery utility that 18 is shipped with --- and I believe was 19 included during this timeframe ---20 that could allow the user to read the 21 battery temperature. 22 Did you say a battery utility? 0. 23 Α. Yes. 24 Q. What do you mean by that? What 25 is a battery utility?

```
86
 1
      Α.
             It is a software utility called
 2
            battery check.
 3
            And you testified that you
 4
      believe that it was in the at-issue
 5
      notebook?
 6
             I can't say for sure it was
      if it was loaded on the software with
8
      the at-issue notebook.
9
            But that software existed at
      Q.
10
      the time that this --- the at-issue
11
      notebook was manufactured?
12
      Α.
            Yes.
13
            So if that software was loaded
14
      into the at-issue notebook, what
      information could the user look at?
15
16
      Α.
            It would --- I don't know
17
      everything. I know that it would show
18
      the battery temperature and
19
      battery health based on the battery
20
      internal assessment of itself.
21
            What do you mean by battery
22
      health?
23
            The primary indicator of
24
      battery health is the number of
25
      charge/discharge cycles that it's
```

```
87
 1
      experienced. And the utility would
 2
      validate if it is --- if the remaining
 3
      capacity is at an acceptable level
 4
      based on the number of charge and
 5
      discharge cycles.
 6
             Ιf
               this software was loaded
 7
      into the at-issue notebook, could the
8
      user view the temperature of each of
9
      the individual cells in the battery
10
      pack that would have been shipped with
11
      the notebook?
12
      Α.
            No.
13
      Ο.
             Same question, but what about
14
      fan speed? Can they view fan speed?
15
            Not with the factory provided
16
      software.
17
      Q.
            What is a thermtrip?
18
      Α.
             It is a term to identify if
19
      system is to be shut down because of
2.0
      thermal --- because the temperature
21
      has gone too high.
22
            Could you describe how exactly
23
      a thermtrip works?
24
            So in general system contact,
      Α.
25
      the thermtrip would indicate that the
```

```
88
      CPU has gone above a certain
1
2
      temperature, and the system should be
3
      shut down to prevent overheating.
4
      Q.
             Does the at-issue notebook shut
5
      down battery charging or limit the
6
      amperage if high battery temperatures
7
      are found?
8
                     ATTORNEY WEINER:
9
                     Objection to form.
10
                     THE WITNESS:
11
                     Yes.
12
      BY ATTORNEY LICATA:
13
      Q.
             You said yes?
14
      Α.
             Yes.
15
      Q.
            How does that work?
16
             If the battery --- I apologize.
17
      Could you repeat the question, the
18
      last question that you asked me?
19
      Q.
             Sure.
                    I asked does the laptop
2.0
      shut down the battery charging or
21
      limit the amperage if high battery
22
      temperatures are found?
23
                     ATTORNEY WEINER:
24
                     Continuing objection.
25
                     THE WITNESS:
```

89 1 You used the term high 2 battery temperatures. 3 Generally, the notebook does 4 regulate charging or not 5 charging based on temperature 6 reported by the battery. 7 ATTORNEY LICATA: 8 0. And how does that work? 9 Α. The battery --- there is 10 single battery temperature that 11 reported by the battery controller 12 the embedded controller in the 13 notebook. If that goes above a 14 threshold, then the charging will be 15 discontinued. 16 For the battery pack that is 17 shipped with the at-issue notebook, is 18 there an acceptable range of 19 temperature that the battery should 20 operate at? 21 Α. Yes. 22 Q . And what is that range? 23 Α. From the battery specification 24 so it is Bates stamped HP003116. 25 allowable operating temperature

```
90
1
      range is zero degrees Celsius to 45
2
      degrees Celsius for charging.
3
            What happens if it goes ---
 4
      what happens if the temperature of the
5
      battery pack that is shipped with the
6
      at-issue notebook goes beyond 45
7
      degrees Celsius?
            The embedded controller inside
8
9
      the notebook computer will tell the
10
      charger controller to not allow
11
      charging.
12
            So does it --- does the
13
      controller completely turns the charge
14
      off or does it limit the charging?
15
            Based on the information I
16
      have,
            it does not allow any charging
17
      above 45 degrees.
18
                    ATTORNEY LICATA:
19
                    I may refer back to this
20
            document, but for now I would
21
            like to mark it as Plaintiff's
22
            Exhibit 2, HP003116.
23
24
                    (Whereupon, Deposition
25
                    Exhibit Number 2, Form
```

```
91
1
                    Number DC-002EA, was
 2
                    marked for
 3
                    identification.)
 4
5
      BY ATTORNEY LICATA:
6
             So I hate to keep moving you
7
      around here, but going back to HP'S
8
      Answer to Interrogatory number 14, I'm
9
      looking one, two, three, four, five,
10
      six, seven lines up from the bottom, a
11
      sentence that starts, an operating
12
      system based.
13
      Α.
            Okay.
14
            So that line --- that sentence
15
      says an operating system based, quote,
16
      critical shutdown, end quote, function
17
      will cause the system to turn off even
      in the event the aforementioned safety
18
19
      features are nonfunctional.
20
            Did I read that correct?
21
      Α.
            Yes.
22
            So critical shutdown is in
23
      quotations. Can you describe what
24
      that critical shutdown function is?
25
      Α.
            So what's being described here
```

92 1 is still in the operating system and 2 the aforementioned safety features are 3 referring to the active thermal 4 management of the CPU throttling and 5 fan. 6 So the critical shutdown 7 function would put the system into 8 it would put it into I believe a 9 forced state, hibernation state which 10 would --- a forced state, hibernation 11 state, which would save the ram to 12 hard drive and turn off the power. 13 And that critical shutdown 14 function is activated once the other 15 safety features become nonfunctional? 16 If it were to reach a threshold 17 beyond indicating the aforementioned 18 controls were not successful. 19 So on the next paragraph it 20 reads, further answering, the 21 EliteBook 8730w shipped with a battery 22 pack which contains design features to 23 monitor and control temperature, 24 voltage and current to ensure the 25 lithium ion battery cells charge and

```
93
 1
      discharge within safe ranges.
 2
             Did I read that correctly?
 3
      Α.
            Yes.
 4
             So when you reviewed the
 5
      pictures and other information you may
6
      have reviewed regarding the battery
7
      pack that Mr. Power was using on the
8
      day of the incident, did you see
9
      of the same design features that
10
      monitor and control temperature,
11
      voltage and current that are
12
      referenced in this part of the answer
13
        Interrogatory 14?
14
            There's --- from the pictures
15
      that were provided, there's no way to
16
      determine if those features were
17
      present or not.
18
      Q.
            Why is that?
19
            I guess a few reasons. One,
      Α.
20
          would have to look at the control
21
      board. And then, two, there would be
22
      no way to physically identify whether
23
      all of those features were present,
24
      because they are also part of firmware
25
      that are programmed into the
```

94 1 controller ID. 2 ATTORNEY BETKE: 3 Josh, just to make it 4 clear, he looked at --- what he 5 referred to was a very limited 6 universe of photographs not 7 like all of the photographs 8 that were taken by our experts. 9 He did not review those. 10 ATTORNEY LICATA: 11 Okay. 12 ATTORNEY BETKE: 13 It is a --- I don't know 14 in my head what is in those 15 photographs, that batch, but he 16 is looking at a discrete 17 universe of photographs. 18 ATTORNEY LICATA: 19 Okay. 20 BY ATTORNEY LICATA: 21 Can you identify all warnings 22 and instructions that were contained 23 on the battery pack that would have 24 been shipped with the at-issue 25 notebook?

```
95
1
            I cannot provide all of them,
2
      because I don't have a picture of the
3
      at-issue --- of the battery pack that
4
      was shipped with the at-issue
5
      notebook. However, we do have a label
6
      that states replace with HP spares.
7
            I'm sorry. Can you repeat the
8
      last part that you said?
                                I missed it.
9
            There's a marking on the label
10
      that states replace with HP spares.
11
           Are you looking at a picture of
12
      a label right now?
13
            I am not sure if that was
14
      included in the documentation or not.
15
            Are there any other warnings
16
      and instructions that you can think of
17
     off the top of your head that
18
      contained on the battery pack that
19
     would have been shipped with the at-
20
      issue notebook?
21
                    ATTORNEY BETKE:
2.2
                    You are saying on the
2.3
            battery pack?
24
                    ATTORNEY LICATA:
25
                    Correct.
```

	96
1	THE WITNESS:
2	I believe there's a
3	warning that says do not
4	dispose of it in fire. I would
5	have to get the labels located
6	to give you any others.
7	ATTORNEY BETKE:
8	Josh, why don't we go
9	ahead? I'll make a note and
10	take a little break and see if
11	he can find the labels and come
12	back to that. Is that okay?
13	ATTORNEY LICATA:
14	Fine with me.
15	<u>ATTORNEY BETKE</u> :
16	Why don't you unless
17	you feel like you have it right
18	there. If you can't read it,
19	we'll note what the page is.
20	THE WITNESS:
21	I can give you the Bates
22	stamp page label.
23	ATTORNEY LICATA:
24	Sure.
25	THE WITNESS:

97 1 HP003134 for the 2 instruction labels, and then 3 the HP CTP label is HP003135. 4 ATTORNEY LICATA: 5 Do you still want to 6 take a break or keep going? 7 THE WITNESS: 8 I'm sorry? 9 ATTORNEY LICATA: 10 Did you guys still want 11 to take a break or keep going? 12 ATTORNEY BETKE: 13 I was actually just 14 looking at the clock and 15 thinking it might be time to 16 take a quick bathroom break, 17 probably as good a time as any. 18 Take a quick break. 19 20 (WHEREUPON, A SHORT BREAK WAS TAKEN.) 21 22 BY ATTORNEY LICATA: 23 So for the power for the 24 adapter here, the one that is shipped 25 with the at-issue notebook, are there

```
98
 1
      any other manufacturers of any of the
 2
      parts of that adapter other than what
 3
      we discussed today already which I
 4
      believe was HIPRO?
 5
            When you say are there any
 6
      other manufacturers, are you asking
7
      for ones shipped with the specific at-
8
      issue notebook or that were qualified
9
      to ship?
10
      Q.
             I guess I'm not quite sure what
11
      that distinction is. What do you mean
12
      by qualified to ship as opposed to
13
      shipped?
14
            So the at-issue adapter, at
15
      issue on both, shipped with a single
16
      HIPRO adapter. And so is your
17
      question, were there other suppliers
18
      other than HIPRO that were qualified
19
      to ship with this model of notebook?
20
      Q.
            Okay.
21
             So how many other models of
22
      chargers were qualified to be used
23
      with this at-issue notebook?
24
                    ATTORNEY BETKE:
25
                    Give me one second.
```

99 1 ATTORNEY WEINER: 2 Hey, David and Chris, if 3 it helps, I think what you are 4 looking for is Answer to 5 Interrogatory number 10 and the 6 attached Exhibit A to it. 7 ATTORNEY BETKE: 8 Yeah. I think that's 9 just going to speak to the 10 actual, the one at-issue. 11 thought, for some reason, the 12 Interrogatory Answers discussed 13 other qualified manufacturers, 14 but I think it might have been 15 in a document response. And I'm referring to this document 16 17 that David, I think, now has in 1.8 front of him ---. 19 ATTORNEY WEINER: 2.0 Okay. 21 ATTORNEY BETKE: 22 I probably delayed him 23 actually. 24 THE WITNESS: 25 So you are asking other

```
100
 1
             than HIPRO, is there another
 2
             supplier qualified ---?
 3
      BY ATTORNEY LICATA:
 4
      Q .
             Qualified, yeah, that's
      qualified to be shipped with the
 5
 6
      at-issue notebook?
7
      Α.
             Yes.
8
            And then I asked how many other
9
      power cords and adapters were
10
      qualified to ship with the at-issue
11
      notebook?
12
             I know you are asking power
13
      cords, which is a trick question.
14
            Oh, okay.
15
             Well, my apologies. I'm not
16
      trying to trick you. Just the adapter
17
      then.
18
             Lite-On is also qualified as an
19
      adapter.
20
             Can you repeat --- what was
21
      that name?
22
      Α.
             Lite-On, L-I-T-E dash O-N.
23
      Q.
            Are you referencing a certain
24
      Bates
            stamp number right now?
25
            I am.
      Α.
```

```
101
 1
             Can you just tell me which one
 2
      that is?
 3
            HP002317.
      Α.
 4
      Q.
             Are you finished answering?
 5
      Α.
            Yes. Yes. Sorry. That is the
 6
      only other supplier of adapters
7
      Q.
             Okay.
8
      Α.
             --- that was qualified to ship
9
      with the at-issue notebook.
10
             When these qualified adapters
11
      are shipped with the at-issue
12
      notebook, is HP'S logo put on them
13
      prior to them being shipped?
14
            Yes.
      Α.
15
             Has the HP --- or has the
16
      battery pack that would have been
17
      shipped with the at-issue notebook
18
      ever been recalled?
19
             I'm sorry. Could you repeat
20
      that?
21
             Sure. Has the battery pack
22
      that would have been shipped with the
      at-issue notebook ever been recalled?
23
24
      Α.
            Not that I'm aware, no.
25
      Q.
             Has the adapter that would have
```

102 1 been shipped with the at-issue 2 notebook ever been recalled? 3 Α. Not that I'm aware of, no. 4 Has the at-issue notebook, the 0. 5 same model as that notebook, has that 6 ever been recalled? 7 Α. No. 8 Do you know if the model 9 at-issue notebook is still sold today? 10 Strike that. Bad question. 11 Can --- the battery pack that 12 would have been shipped with the 13 at-issue notebook, can it be used in 14 other brands of laptops? 15 ATTORNEY WEINER: 16 Objection. It goes 17 beyond the scope of the notice. 18 ATTORNEY LICATA: 19 I mean, I would say 20 number three puts it in that 21 scope, but are you going to say 22 for him not to answer? 23 ATTORNEY BETKE: 24 Josh, how about this? 25 I'll allow him to answer to his

103 1 knowledge, but it won't be a 2 30(b)(6) response. Is that a 3 fair compromise? 4 ATTORNEY LICATA: 5 That's fair. 6 ATTORNEY BETKE: Okay. Go ahead. 8 THE WITNESS: 9 I couldn't speculate 10 that it would fit mechanically 11 or work, function electrically 12 with anything other than this 13 particular notebook. 14 BY ATTORNEY LICATA: 15 0. One of the topics we requested 16 that we talk about today is number 16, 17 safety testing of the subject laptop 18 battery pack and cells. Can you 19 describe the safety testing of the 20 cells of the subject battery pack? 21 ATTORNEY BETKE: 22 Sorry. You left out 23 like every other word. 24 could probably guess the 25 question, but obviously you

104 1 don't want us to guess the 2 question. Could you 3 please ---? 4 ATTORNEY LICATA: 5 Sure. 6 BY ATTORNEY LICATA: 7 0. One of the topics we asked you 8 to review today was number 16, the 9 safety testing of the subject laptop 10 battery pack and cells. My question 11 was, can you describe the process of 12 safety testing for the cells of the 13 battery pack that would have been sold 14 or shipped with the subject laptop? 15 ATTORNEY BETKE: 16 Just remember what I was 17 saying about design and 18 manufacture, that there may be 19 two separate categories on 20 that. So if you want him to do 21 both, he'll do the best he can. 22 But I just wanted to be 23 it's important that you and he 24 are on the same page in that 25 regard.

105 1 ATTORNEY LICATA: 2 Correct. 3 BY ATTORNEY LICATA: 4 Let's go with design, because I 5 believe you testified HP is involved 6 with the design part of it, so we'll 7 go with the design. 8 Yeah. So we require that the 9 pack go through 6950 testing, and 10 there is additional cell level safety 11 testing that is done. 12 ATTORNEY BETKE: 13 UL6950. 14 THE WITNESS: 15 UL6950, and there --- I 16 don't know if I have the cell 17 level safety support number. 18 ATTORNEY BETKE: 19 Why don't you just tell 20 him who does the testing? 21 can figure out the standard 22 later. 23 THE WITNESS: 24 Okay. 25 So at a high level, the

106 1 pack cell suppliers do their 2 own internal testing. 3 requires a third party validate 4 and go through the industry 5 standard 6950 and 1642 testing 6 that cell level. Does that 7 answer your question? 8 BY ATTORNEY LICATA: 9 Yeah. So I'm just going to Q. 10 switch gears a little bit here, but 11 --- well, let me make sure here. Are 12 you aware that there are battery packs 13 and cells that are not approved for 14 use by HP that can fit into the 15 at-issue laptop? 16 ATTORNEY WEINER: 17 Objection to form. 18 THE WITNESS: 19 You asked if I am aware 20 that there are battery packs 21 and/or cells that would fit 22 I'm sorry. Could you repeat 23 the question? 24 BY ATTORNEY LICATA: 25 Q. Sure. Are you aware that there

107 1 are battery packs and cells that are 2 not approved by HP that can fit into 3 the at-issue laptop? 4 ATTORNEY WEINER: 5 Continuing. 6 THE WITNESS: 7 Yes, I am aware. 8 BY ATTORNEY LICATA: 9 Are you aware that there are 10 hundreds of manufacturers of batteries 11 out there where they make batteries 12 that can fit into HP products? 13 ATTORNEY WEINER: 14 Objection to form. 15 THE WITNESS: 16 I'm not aware of a 17 number of, a quantity of 18 manufacturers. 19 BY ATTORNEY LICATA: 20 I'm not asking for a specific 21 number, but you are aware that there's 22 a lot of them. 23 Correct? 24 ATTORNEY WEINER: 25 Continuing.

108 1 THE WITNESS: 2 I won't speculate. 3 There's likely more than one, 4 yes. 5 BY ATTORNEY LICATA: 6 Q. Does Hewlett-Packard in the 7 manufacturing of their product 8 manufacturers and designers of their 9 product --- design their laptops, 10 specifically the at-issue notebook, 11 knowing that their consumers may 12 possibly purchase battery packs that 13 are non-HP approved? 14 ATTORNEY WEINER: 15 Objection to form. 16 ATTORNEY BETKE: 17 I'm going to allow him 18 to testify on his personal 19 knowledge, but the choices made 20 by consumers is not a category 21 in the deposition notice. 22 I don't think David really has 23 any particular knowledge about 24 the choices made by consumers. 25 So I'll let him --- he is

109 1 sitting here. I'll let him 2 testify to his personal 3 knowledge, but can we agree 4 that it is not binding on the 5 corporation? It is not a 6 30(b)(6) response. 7 ATTORNEY LICATA: 8 Well, I'm not --- here 9 is the thing. I'm not 10 necessarily asking whether they 11 have knowledge that consumers 12 actually do that. I'm just 13 wondering if HP designs their 14 products with that assumption 15 in mind, that their consumers 16 may do that. I think there's a 17 distinction there, but ---. 18 ATTORNEY BETKE: 19 Are you still asking him 20 about his knowledge about what 21 consumers may do? I'm not 22 really sure I understand it. 23 Do you want to take a 24 break and discuss it to see if 25 --- let's go off the record for

```
110
 1
             a moment.
 2
                     ATTORNEY LICATA:
 3
                     Okay. You guys can
 4
             discuss. I'll leave.
 5
6
      (WHEREUPON, A SHORT BREAK WAS TAKEN.)
7
8
                     ATTORNEY BETKE:
9
                     Go ahead.
10
                     THE WITNESS:
11
                     To answer that last
12
             question, we design the
13
             notebook to interact
14
             specifically with HP approved
15
             battery packs. And I can't
16
             speculate or comment on what
17
             the behavior would be beyond
18
             that.
19
      BY ATTORNEY LICATA:
20
      Q.
             Okay.
21
             What software inputs are
22
      received by the CPU from the battery
23
      pack that would have been shipped with
24
      the at-issue notebook?
25
                     ATTORNEY WEINER:
```

111 1 Objection to form. 2 THE WITNESS: 3 Are you asking 4 specifically what would have 5 been received by the CPU or 6 just in general by the 7 notebook? 8 BY ATTORNEY LICATA: 9 Let's start with in general and 10 we may go to specifics, but let's 11 start with in general. 12 So the communication between Α. 13 the battery controller in the system 14 is handled by the embedded controller 15 in the notebook, which is a 16 subcomponent. It is not the CPU. 17 0. Okay. 18 So what specific about that 19 communication are you asking about? 20 Well, the communication from Ο. 21 the battery that I am more interested 22 in is voltage and temperature that the 23 battery would communicate with the 24 CPU? 25 ATTORNEY WEINER:

112 1 Object to the form. Dο 2 you understand what he is 3 asking, David? 4 THE WITNESS: 5 So are you asking for 6 battery current, voltage, 7 temperature, how that is 8 communicated, what specifics 9 --- I'm not ---. 10 BY ATTORNEY LICATA: 11 Q. What specifically is --- I'm 12 sorry. I didn't mean to cut you off. 13 What specifically is communicated 14 regarding those measurements? 15 Well, at a high level, the 16 current status of the temperature is 17 reported and s request for a 18 particular charge current and charge 19 voltage is requested from the battery 20 controller or notebook. 21 Okay. Q. 22 Regarding the battery pack that 23 would have been shipped with the 24 at-issue notebook, does HP have a 25 recommendation as to how long those

113 1 battery packs last? 2 In terms of charge cycles or 3 warranty, I believe --- I don't have 4 the warranty details of the particular 5 notebook. 6 However, we sell one and three 7 year warranties. I believe this 8 particular warranty most likely would 9 have been a three year warranty for the system and a one year warranty for 10 11 the battery. 12 And you mentioned charge 0. 13 cycles. Does HP have a number of 14 charge cycles after which they 15 recommend you replace the battery, 16 speaking about the specific battery 17 that is shipped with the at-issue 18 notebook? 19 Α. We do have a recommendation. 20 I'm not sure if we have that document. 21 I hate to ask you to 22 approximate, but do you have an 23 educated guess as to how many cycles 24 that is? 25 ATTORNEY BETKE:

	114
1	Objection to the form,
2	but you can go ahead and do it.
3	Michael can object. I'm
4	sorry. I can't help myself,
5	Josh.
6	ATTORNEY LICATA:
7	That's all right.
8	That's all right.
9	ATTORNEY BETKE:
10	Go ahead. You can go
11	ahead and answer it.
12	THE WITNESS:
13	I don't have the
14	document with me. I believe it
15	is roughly 300 charges per
16	cycle.
17	ATTORNEY WEINER:
18	David, my understanding
19	of the question is Josh is
20	asking you for your own
21	personal knowledge not on
22	behalf of HP.
23	ATTORNEY LICATA:
24	Right, that's fine.
25	ATTORNEY WEINER:

115 1 Correct. 2 ATTORNEY LICATA: 3 just want to know 4 since we don't have the document if he has an educated 5 6 quess and that's fine. It 7 doesn't have to be binding on 8 the 30(b)(6). 9 BY ATTORNEY LICATA: 10 So you mentioned there's a one 11 year warranty on the battery that 12 would ship with the at-issue notebook. 13 If the battery fails within that one 14 year, does HP replace that battery 15 free of charge? 16 Α. Yes. 17 And do you know what the 18 requirements to meet the terms of that 19 one year warranty are? 20 ATTORNEY WEINER: 21 Object to form. 22 BY ATTORNEY LICATA: 23 0. I can be more specific. Does 2.4 the battery have to not be able to 25 retain any charge at all? Does

```
116
 1
      have to be at 20 percent of its full
 2
      power or whatever it is?
                                 You know,
 3
      you mentioned the battery health
      earlier. Is there a certain criteria
 4
 5
      that a user has to meet in order to
 6
      get that one year warranty and have HP
7
      replace it for free?
8
             I'm not aware of the details to
9
      validate a specific warranty, approved
10
      or not.
11
            Do you know what VDC stands
12
      for?
13
            Just to clarify, you said
      Α.
14
      victor bravo charley?
15
      Q.
            Victor delta charley.
16
      Α.
            No. I can't say that I do.
                                            Ιt
17
      may help with the context.
18
      Ο.
            Okay.
19
             So what if I represented to you
20
      that the at-issue notebook could
21
      operate at 18.5 VDC at 120 watts?
22
      Α.
            Oh, voltage DC.
23
      Q.
            Okay.
24
            So if I represented to you that
25
      the at-issue notebook could operate at
```

117 1 18 and a half VDC at 120 watts or 19 and half VDC at 150 watts, can the 2 3 batteries themselves also run at that 4 VDC? 5 ATTORNEY WEINER: 6 Object to the form. 7 THE WITNESS: 8 No. 9 BY ATTORNEY LICATA: 10 Why not? 11 The VDC you referenced 12 previously was the direct output of 13 the adapter into the notebook and 14 there's not a direct linkage from that 15 to the battery. 16 Q. Okay. 17 And although you may have 18 testified to this before, why isn't 19 there a direct linkage between the 20 adapter and to the battery? 21 Because the charging voltage 22 and current has to be carefully 23 There are --- there's a controlled. 24 battery charger sub-system within the 25 notebook computer that controls the

```
118
1
      current and voltage to the battery
2
      pack as the communicated levels have
3
      been identified by the EC in the
4
      notebook.
5
                     ATTORNEY LICATA:
6
                     While I'm thinking, I'm
7
             going to mark the
8
             Interrogatories as Plaintiff's
9
             Exhibit 3.
10
11
                     (Whereupon, Deposition
12
                     Exhibit Number 3,
13
                     Defendant's Answers to
14
                     Plaintiff's
15
                     Interrogatories, was
16
                     marked for
17
                     identification.)
18
19
                     ATTORNEY LICATA:
20
                    And I referenced the
21
             Notice, so I'll mark that as 4.
22
23
                     (Whereupon, Deposition
24
                     Exhibit Number 4,
25
                     Amended Notice of
```

	119
1	Deposition, was marked
2	for identification.)
3	
4	<u>ATTORNEY BETKE</u> :
5	Did you say
6	Interrogatory three?
7	ATTORNEY WEINER:
8	No. He's marking the
9	Interrogatories as Plaintiff's
10	3 and the Deposition Notice as
11	Plaintiff's Exhibit 4.
12	ATTORNEY BETKE:
13	All right.
14	I was responding to an
15	email someone sent me when you
16	said that.
17	ATTORNEY LICATA:
18	We're all guilty of that
19	at some point.
20	BY ATTORNEY LICATA:
21	Q. Are you aware that there was
22	surveillance video that captured this
23	incident on camera?
24	A. I heard there was a video
25	provided. I'm not privy to that.

	120
1	Q. Okay.
2	Did you happen to read Mr.
3	Power's deposition transcript?
4	A. I'm not sure
5	ATTORNEY BETKE:
6	No, that is not part of
7	our stuff.
8	ATTORNEY LICATA:
9	Okay.
10	ATTORNEY BETKE:
11	I only interjected
12	because he was looking at some
13	of our discovery responses,
14	Josh. I'm not sure if you saw
15	that, but it is not in our
16	discovery response.
17	ATTORNEY LICATA:
18	Okay.
19	Well, I'm winding down,
20	so if you have any questions
21	that's fine. I'm just going to
22	take a few minutes to look over
23	everything to see if I'm
24	ATTORNEY BETKE:
25	Do you want to take a

```
121
             few minutes to look at your
1
 2
             notes and then we'll come back?
 3
                    ATTORNEY LICATA:
 4
                     Sure, yeah, unless you
5
             guys have anything.
6
                    ATTORNEY BETKE:
7
                    We're not going to.
8
                    ATTORNEY WEINER:
9
                    No, no questions.
10
                    ATTORNEY LICATA:
11
                    All right. Let me take
12
             a look at this.
13
14
      (WHEREUPON, A SHORT BREAK WAS TAKEN.)
15
16
      BY ATTORNEY LICATA:
17
         I have just a couple questions.
18
      and they're both referencing
19
      Plaintiff's Exhibit 3, which is HP'S
20
      Answers to Plaintiff's
      Interrogatories.
21
22
             Number 14, last paragraph,
      three lines down there's a sentence
23
2.4
      that starts with, in addition, HP
25
      tests. Let me know when you see that?
```

122 1 You did say number 14? Α. 2 Third paragraph, three lines 3 down on the third paragraph, it starts with, in addition, HP tests? 4 5 Α. Yeah. 6 ATTORNEY BETKE: 7 You got it. 8 BY ATTORNEY LICATA: 9 It says, in addition, HP tests 10 lithium ion battery cells by 11 overcharging cells at various voltages 12 to ensure they will fail safely and in 13 a benign manner. 14 Did I read that correctly? 15 Α. Yes. 16 So can you describe or can you 17 tell me to what degree these cells are 18 overcharged? Can you just give me a 19 voltage? 20 I don't know off the top of my 21 It may be listed in the spec or 22 the --- as well as the UL standard 23 parameters, but I don't have that at 24 hand. 25 Q. Okay.

```
123
 1
      Α.
             Do you need us to find that?
 2
            Well, I'm looking at what we
 3
      marked as Plaintiff's Exhibit 2, which
 4
      is Bates stamp HP003116. And it lists
 5
      a maximum charge current and a maximum
 6
      charge voltage.
7
      Α.
            All right.
8
             That's for the pack.
9
             That's for the pack, not
10
      necessarily the individual cells?
11
             Right. And it is not
      Α.
12
      representative of the safety testing
13
      parameters.
14
            Also, at the very end ---
15
      Interrogatory 14 at the very end of
16
      the first paragraph, it mentions that
17
      the EliteBook's housing is also made
18
      of UL 94 V-0 rated plastic, which is
19
      self-extinguishing and will not
20
      sustain combustion. Do you see that?
21
      Α.
            Yes.
22
            Do you know who makes that
23
      plastic?
24
            No, I do not know the supplier.
25
      There's typically several suppliers
```

```
124
1
      that are qualified for the chassis
2
      plastic, and it is not something that
 3
        tracked in the database.
4
      0.
            And you are saying if I wanted
5
      to find what these battery cells are
6
      overcharged to, it is somewhere in the
7
      specs of the cells themselves?
8
             It would be in the parameters
9
      of the test, the overcharge test,
10
      which is in the UL specification,
11
      16.2.
12
                    ATTORNEY LICATA:
13
                    Okay.
14
                    I have nothing further.
15
              Thank you very much.
16
                    ATTORNEY BETKE:
17
                    Okay.
18
                    Thank you. We want to
19
             do a little housekeeping real
20
             quick with you, Josh.
21
                    ATTORNEY LICATA:
22
                    Sure.
      (WHEREUPON, AN OFF RECORD DISCUSSION
23
24
      WAS HELD.)
25
```

```
125
 1
 2
           DEPOSITION CONCLUDED
                                        AT 1:27 P.M.
 3
 4
 5
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
```

126 COMMONWEALTH OF PENNSYLVANIA 1 2 COUNTY OF INDIANA 3 CERTIFICATE 4 I, Lacey C. Scott, a Notary Public in 5 and for the Commonwealth of Pennsylvania, do 6 hereby certify: 7 That the witness, David Pipho, whose 8 testimony appears in the foregoing deposition, 9 was duly sworn by me on 11-27-18 and that the 10 transcribed deposition of said witness is a 11 true record of the testimony given by said 12 witness; 13 That the proceeding is herein recorded 14 fully and accurately; 15 That I am neither attorney nor counsel 16 for, nor related to any of the parties to the 17 action in which these depositions were taken, 18 and further that I am not a relative of any 19 attorney or counsel employed by the parties 2.0 hereto, or financially interested in this 21 action. 22 Dated the 8th day of December, 2018 23 Commonweath of Pennsylvania - Notary Seal Lacey C Scott, Notary Public Cambria County 24 My Commission Explose June 5, 2022 Commission Number 1189273 25 Lacey Scott, Court Reporter

				raye 1
A	121:24	and/or 81:11	108:13	assembled
a.m2:13	122:4,9	106:21	110:14	12:5
able 115:24	additional	answer8:10	116:9	assembly
	84:7	22:17 28:2	approximate	30:24 31:4
Absolutely	105:10	53:3 55:20	113:22	37:13
41:20	address 8:20	59:6 61:20	approxim	assessment
AC 67:23	8:21,22	66:13	10:19 16:2	86:20
75:7	9:2	74:12	16:6	Associate's
acceptable 87:3 89:18	advanced	83:23 91:8	artifact	11:4
	11:23 12:1	93:12 99:4	29:5,8	assumption
accurately	13:22 14:2	102:22,25	34:11	109:14
126:14	aforemen	106:7	46:20	at- 26:12
action	91:18 92:2	110:11	56:20	44:24
126:17,21	92:17	114:11	57:25	95:19 98:7
activated	agency 1:25	answering	58:14,18	at-issue
92:14	agree 109:3	8:18 41:12	59:14,15	26:15,20
active 83:25	agreed 7:3	41:13,14	as-shipped	26:24
84:4 92:3	51:15 52:7	41:15	82:6	28:11,20
actual 99:10	ahead 25:11	92:20	aside 71:23	29:14,16
adapter	28:24	101:4	asked 42:8	30:7,16,20
57:25 58:7	48:17	Answers 5:8	62:7 81:2	31:7,14
58:14,15	62:18	57:16	84:25	32:8 33:3
58:18	71:15,16	99:12	88:18,19	33:22
59:14,17	76:14	118:13	100:8	34:23
59:22,24 60:24 61:8	78:13 96:9	121:20	104:7	35:10,22
61:16,22	103:7	anyway 34:8	106:19	36:13,19
62:1,10	110:9	apologies	asking8:16	38:9,16
63:5,8,11	114:2,10	100:15	24:17	39:6,13,20
63:17	114:11	apologize	28:19	42:17
64:16	Alan 7:21	28:1 38:24	40:16 41:4	43:23 44:3
66:16,20	alarm 82:9	74:14	41:23	44:19 45:4
67:8,11,13	allow 76:7	88:16	45:15,17	45:10 46:7
67:21,23	85 : 20	apparently	45:18	46:25
68:9,14	90:10,16	51:22	46:11	47:16,21
69:13	102:25	appears 61:1	66:20	51:7 53:25
70:19	108:17	82:10	69:11,15	54:12
72:13 74:9	allowable	126:8	70:12	59:18,23
74:19 75:5	89:25	applied 11:4	71:18 72:1	61:9,17
75:7,16	aloud 78:17	84:17	72:4 74:18	62:3,11
97:24 98:2	78:19	appreciate	82:15 85:5	63:6,8,12
98:14,16	Amended $5:11$	52:1 56:4	85:7,11	63:18 64:7
100:16,19	21:25	appropriate	98:6 99:25	66:17,22
101:25	118:25	18:25 75:8	100:12	70:24 71:3
117:13,20	amount 16:21	approved	107:20	72:21 73:3
adapters	20:4,8	27:15	109:10,19	75:17 76:6
100:9	69:14	28:15	111:3,19	79:16,23
101:6,10	amperage	82:11,16	112:3,5	80:7 81:7
addition	88:6,21	82:21	114:20	81:14 82:8
78:1,5,21	amps 54:9	106:13	aspects	83:12
78:25 79:2	63:25	107:2	81:12	84:14,18

47:19,20					Page 3
48:10,23 122:10 56:13 57:9 47:18 30:17 + 18 30:17 + 18 30:17 + 18 30:17 + 18 30:12 + 5 30:4 + 55:19 30:4 + 55:19 30:8 62:13 60:2 boards 13:8 64:8,12 80:14 + 55:19 80:14 + 55:19 80:14 + 55:19 80:12 80:14 + 55:19 80:12 80:12 80:12 80:12 80:12 80:12 80:10 80:10 90:18 80:12 80:10 90:18 90:10 19:23 65:13 10:17 65:20 78:14 74:11 75:20 78:2 80:10 90:18 90:18 90:18 90:18 90:18 90:18 90:18 90:18 90:18 90:19 90:18 90:18 90:18 90:18 90:18 90:19 90:18 90:18 90:18 90:18 90:19 90:18 90:19 90:18 90:19 90:18 90:19 90:18 90:19 90:18 90:19 90:18 90:19 90:18 90:19 90:18 90:19 90:18 90:19 90:18 90:19 90:18 9	47-10-00	110.1	FF-16-04	1	10.6
48:10,23 50:23,24 beginning 60:3,8,13 61:24 boards 13:8 64:8,12 2:12 51:13 80:8 64:23 64:23 64:4,12 80:12	1				
50:23,24 beginning 60:3,8,13 93:21 34:4 55:19 51:2,6,8 2:12 51:13 61:24 boards 13:8 4:4,12 80:12 53:24 behalf 2:3 64:23 behavior 65:13 71:6 bottom 91:10 96:18 59:16 79:5 48:9 71:21 brand 26:5 110:15 brand 33:4 114:4 33:24 116:16 110:15 brand 33:4 114:4 110:15 point of sime stand of sime sta	i				1
51:2,6,8 2:12 51:13 61:24 boards 13:8 64:8,12 52:23 behalf 2:3 62:13 64:2 Boston 3:18 80:225 86:6 53:24 behavior 71:21 bottom 91:10 96:18 58:23 59:16 79:5 48:9 74:11 brand 26:5 10:15 79:7,15,22 110:17 75:20 78:2 33:24 116:16 20:21 81:6,8,12 22:2 29:14 80:10 brand 33:4 114:4 2apacity 81:13,31 56:14 57:4 80:10 braw 16:14 break 64:20 87:3 56:14 57:4 84:19 85:4 65:4,21 56:5,14 57:4 84:19 85:4 65:4,21 65:20 97:11,16 27:10 27:21 20:10 20:11 20:12 20:11 20:12 20:11 20:12 20:11 20:12 20:11 20:12 20:11 20:12 20:11 20:12 20:11 20:12 20:11 20:12 20:11 20:12 20:11 20:12 20:11 20:12 20:11 20:12 20:11 20:12					can't8:5
52:23 80:8 62:13 64:2 14:4:12 80:12 80:25 86:6 53:24 behavior 71:21 bottom 91:10 96:18 10:15 79:7,15,22 48:9 110:17 71:21 brands 33:4 110:15 110:15 80:1,2,5 believe 15:2 22:2 29:14 80:10 bravo 116:14 bravo 11	50:23,24	beginning	60:3,8,13	93:21	34:4 55:19
53:24 behalf 2:3 64:23 Boston 3:18 82:25 86:6 58:23 behavior 71:21 brand26:5 110:15 59:76 79:5 48:9 74:11 75:20 78:2 33:24 116:16 80:1,2,5 believe 15:2 78:14,24 110:17 brands 33:4 114:4 81:6,8,12 22:2 29:14 80:10 brands 33:4 116:16 82:13 83:1 56:14 57:4 80:10 braw 116:14 19:2,10 84:15 85:1 62:14 94:2,12 65:40,12 22:2 29:14 84:15 85:1 62:14 94:2,12 65:40,12 27:10 85:13,17 73:15 95:21 96:7 96:10 97:6 65:4,12,15 captured 85:13,17 73:15 95:21 96:7 96:10 97:6 65:4,12,15 cart 23:25 cart	51:2,6,8	2:12 51:13	61:24	boards 13:8	64:8,12
53:24 behalf 2:3 64:23 Boston 3:18 82:25 86:6 58:23 behavior 71:21 brand 26:5 110:15 59:16 79:5 48:9 74:11 brand 26:5 110:15 79:7,15,22 believe 15:2 78:14,24 110:14 belavior 114:4 116:16 capacity 81:6,8,12 22:2 29:14 80:10 brands 33:4 114:4 116:16 capacity 81:13 3:1 56:14 57:4 80:10 brand 64:20 87:3 capacity 82:13 83:1 56:14 57:4 80:10 brack 4:20 capacity	52:23	80:8	62:13 64:2	14:4,12	80:12
54:11 55:9 114:22 behavior 65:13 71:6 brand26:5 brand26:5 110:15 96:18 110:15 brand26:5 110:15 brand26:5 110:15 brands33:4 116:16 110:15 brands33:4 116:16 110:15 brands33:4 110:12 110:16 110:	53:24	behalf 2:3	64:23	1	82:25 86:6
58:23 behavior 71:21 brand 26:5 110:15 110:15 79:7,7,5,22 48:9 74:11 75:20 78:2 33:24 116:16 116:16 capacity 116:16 capacity 116:16 capacity 116:16 capacity 19:2,10 87:3 86:18 88:19 88:14 102:14 break 64:20 87:3 86:14 57:3 84:19 85:4 96:15 96:15 96:15 97:11,16 capacity 19:2,10 2care 51:24 2care 51:24 87:3 86:18,12 87:3 86:18,12 87:3 86:19 96:15 97:11,16 87:3 86:12,20 98:21 96:15 97:11,16 97:18,20 117:22 care 51:24 care 51:24 2care 51:24 2care 51:24 2care 51:24 2care 51:24 2care 51:24 2care 51:24 17:22 2care 51:24 2ca	54:11 55:9	1			
59:16 79:5 48:9 74:11 75:20 78:2 brands 33:4 114:4 116:16 capacity 80:1,2,5 81:6,8,12 82:22 29:14 80:10 bravo 116:14 bravo 116:14 <th>1</th> <td></td> <td></td> <td></td> <td></td>	1				
79:7,15,22 110:17 believe15:2 78:14,24 33:24 116:16 capacity 81:6,8,12 22:2 29:14 80:10 braw0116:14 break 64:20 87:3 82:11 83:1 56:14 57:4 84:19 85:4 65:20 65:4,12,15 captured 85:13,17 73:15 95:21 96:7 96:10 97:6 care51:24 carefully 85:25,86:2 85:18 86:4 97:12 96:10 97:6 carefully 117:22 86:18,19 92:8 96:2 98:24 99:7 97:18,20 117:22 carefully 86:19,21 98:4 105:5 99:21 109:24 cart23:25 case1:6 86:19,21 98:4 105:5 99:21 10:6 26:13,21 breaking 26:24 17:19 26:24 26:13,21 breaking 26:24 26:13,21 breaking 38:20 39:25 case 1:6 26:13,21 26:24 26:24 51:23 38:20 39:25 26:24 51:23 38:20 39:25 26:24 25:31 25:5 10:14 breaking	1	1			
80:1,2,5 believe 15:2 78:14,24 102:14 capacity 81:6,8,12 22:2 29:14 80:10 57:3 19:21 19:21 19:21 19:21 19:21 19:21 19:22 19:14 19:22 19:14 19:22 19:21 19:22 19:22 20:14 19:22 20:14 19:22 20:14 19:22 20:24 19:22 20:24 48:19 85:4 19:22 20:24 65:4,12,15 66:24 65:4,12,15 66:24 20:21 96:15 96:15 97:11,16 97:11,16 20:21 20:21 20:21 20:21 20:22 20:21 20:22 20:21 20:23 10:22 110:22 20:21 20:24 110:22 20:21 20:23 10:223 10:21:14 10:22 20:21:14 97:12,16 97:11,16 20:21:14 20:22 20:21:14 97:12,10 20:22 20:21 20:23 10:223 110:21 110:22 20:21 20:23 10:21:14 50:223 12:14 50:223 20:21	1		1		
81:6,8,12 22:2 29:14 80:10 bravo 116:14 19:2,10 81:23 56:14 57:4 84:19 85:4 brak 64:20 87:3 84:15 85:1 66:14 57:4 84:19 85:4 65:4,12,15 captured 85:13,17 73:15 95:21 96:7 96:10 97:6 care 51:24 85:21,22 79:18 96:15 97:11,16 care 51:24 86:18,19 92:8 96:2 98:24 99:7 97:11,16 care 51:24 86:18,19 92:8 96:2 98:24 99:7 109:24 care 51:24 86:19,21 98:4 105:5 99:21 110:6 case 1:6 86:24 87:9 113:3,7 102:23 121:14 26:13,21 88:20,21 bend 68:24 104:15 51:23 38:20 89:10,11 benign 108:16 bring 65:6 bring 65:6 89:23 90:5 bent 70:15 113:25 broad24:17 25:23 26:3 95:3,18,23 best 8:8 119:4,12 14:20 33:7 categories 95:3,18,20 104:10 12:25 broke 9:10 14:20 33:7 categories 104:10,13 3	1				
81:23 54:3 56:11 82:13 84:19 85:4 65:4,12,15 63:4,12,15 63:4,12,15 63:4,12,15 63:4,14 63:4,14 79:12,16 69:10 97:11,16 63:4,12 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14 63:4,14			•		. – –
82:11 83:1 56:14 57:4 84:19 85:4 65:4,12,15 captured 84:15 85:1 62:14 94:2,12 96:10 97:6 care51:24 85:13,17 73:15 96:15 97:11,16 care51:24 85:27,22 85:18 86:4 97:12 97:18,20 p7:18,20 86:19,21 98:4 105:5 99:21 110:6 care1:32 86:19,21 98:4 105:5 99:21 110:6 26:13,21 86:24 87:9 113:3,7 102:23 121:14 26:13,21 88:5,6,16 114:14 103:6,21 breaking 26:24 88:20,21 bend 68:24 106:15 breaking 38:20 89:10,11 benign 108:16 3:10 39:25 89:16,19 122:13 Bricklin 39:25 89:23,90:5 Bennett 3:10 109:18 bring 65:6 categories 93:6,94:23 99:10 114:9 broader 55:4 categories 95:3,18,23 80:2 119:4,12 14:20 33:7 categories 95:3,18,23 80:2 120:5,10 33:13,15 26:13 25:23 26:3 102:11 104:21 120:5,10 33:13,15 25:4 59:4 26:14 26:34 <tr< td=""><th></th><td></td><td></td><td></td><td>1</td></tr<>					1
84:15 85:1 62:14 94:2,12 65:20 119:22 85:13,17 73:15 96:15 97:11,16 97:18,20 85:25,86:2 85:18 86:4 97:12 97:11,16 97:18,20 86:18,19 92:8 96:2 98:24 99:7 109:24 carefully 86:19,21 98:4 105:5 99:21 110:6 care1:3:25 86:24 87:9 113:3,7 102:23 121:14 26:13,21 88:20,21 bend 68:24 104:15 51:23 38:20 89:2,6,9 70:2,3 105:12,18 Bricklin 39:25 89:10,11 benign 109:18 bring 65:6 casing 25:21 89:21,25 bent 70:15 113:25 broad 24:17 25:23 26:3 92:21,25 bent 70:15 113:25 broad 24:17 25:23 26:3 92:21,25 bent 70:15 113:25 broad 24:17 25:23 26:3 95:3,18,23 best 8:8 119:4,12 14:20 33:7 104:19 102:11 104:21 120:24 43:25 55:18 104:10,13 3:16 6:9 122:6 building 12:8 107:1 28:25 29:21 30:1 15:6 building 29:17 cell 45:6 112:22 <td< td=""><th>•</th><td></td><td></td><td></td><td></td></td<>	•				
85:13,17 73:15 95:21 96:7 96:10 97:6 care 51:24 85:21,22 79:18 96:15 97:11,16 17:22 86:18,19 92:8 96:2 98:24 99:7 109:24 cart 23:25 86:19,21 98:4 105:5 99:21 110:6 26:13,21 86:24 87:9 113:3,7 102:23 121:14 26:13,21 88:5,6,16 114:14 103:6,21 breaking 26:24 88:20,21 bend 68:24 104:15 51:23 38:20 89:10,11 benign 108:16 3:10 47:19 89:21,25 bennett 3:10 bening 65:6 casing 25:21 89:21,25 bent 70:15 113:25 broade 75:4 categories 93:6 94:23 72:5 114:19 broke 9:10 25:23 26:3 90:21,25 best 8:8 119:4,12 14:20 33:7 104:19 104:10,13 3:16 6:9 122:6 building 12:8 104:10,13 3:16 6:9 122:6 built 12:9 bulk 21:20 107:1 28:25 29:21 30:1 15:6 bysond 32:18 bus 12:15 46:13,17 11:23 36:21 37:3 34:1,7 79 126:4 46:13,17 105:10,16 11:2:22 </td <th></th> <td></td> <td></td> <td></td> <td>. –</td>					. –
85:21,22 79:18 96:15 97:11,16 carefully 85:25 86:2 85:18 86:4 97:12 109:24 117:22 86:18,19 98:4 105:5 99:21 109:24 cart 23:25 86:24 87:9 113:3,7 102:23 121:14 26:13,21 88:5,6,16 bend 68:24 104:15 51:23 38:20 89:2,6,9 70:2,3 105:12,18 breaking 39:25 89:10,11 benign 108:16 3:10 47:19 89:23 90:5 bent 70:15 113:25 broad 24:17 25:23 26:3 93:6 94:23 best 8:8 119:4,12 14:20 33:7 25:23 26:3 95:3,18,23 104:21 109:18 broke 9:10 55:18 103:18,20 104:21 109:24 43:25 55:18 104:10,13 80:20 120:5,10 33:13,15 category 104:10,13 3:16 6:9 122:6 building caught 29:3 106:12,20 25:9 27:10 124:16 built 12:9 built 2:9 11:23 35:12 36:9 34:1,7 66:13,17 46:13,17 11:23 36:21 37:3 45:25 90:6 62:26 3:1 62:26,8 11:1:22 40:21 42:2 102:17	•				
85:25 86:2 85:18 86:4 97:12 97:18,20 117:22 cart 23:25 86:18,19 98:4 105:5 99:21 110:6 case 1:6 26:13,21 86:24 87:9 113:3,7 102:23 121:14 26:13,21 26:24 88:5,6,16 88:20,21 bend 68:24 104:15 51:23 38:20 89:2,6,9 70:2,3 105:12,18 bring 65:6 39:25 89:10,11 benign 109:18 bring 65:6 casing 25:21 89:23 90:5 bennett 3:10 10:8 broad 24:17 25:23 26:3 93:6 94:23 72:5 114:9 broad 24:17 25:23 26:3 95:3,18,23 101:16,21 10:8 broad 24:17 25:23 26:3 95:3,18,23 80:20 120:5,10 33:13,15 categories 104:10,13 3:16 6:9 12:6 building caught 29:3 107:1 28:25 27:10 24:16 better 14:15 108:20 12:8 107:1 28:25 29:1 30:1 15:6 building caught 29:3 112:6,19 37:16 92:17				l control of the cont	care 51:24
86:18,19 92:8 96:2 98:24 99:7 109:24 cart 23:25 86:19,21 98:4 105:5 113:3,7 99:21 110:6 26:13,21 88:5,6,16 114:14 103:6,21 breaking 26:24 88:20,21 bend 68:24 104:15 51:23 38:20 89:2,6,9 70:2,3 105:12,18 3:10 47:19 89:10,11 benign 108:16 3:10 25:23 26:3 89:23,90:5 Bennett3:10 bring 65:6 bring 65:6 castegories 93:6 94:23 72:5 bent 70:15 113:25 broade 4:17 25:23 26:3 95:3,18,23 80:20 120:5,10 33:13,15 24:20 25:23 26:3 95:3,18,20 80:20 120:5,10 33:13,15 24:20 55:18 103:18,20 3:16 6:9 122:6 63:14 80:8 108:20 104:10,13 3:16 6:9 122:6 bulk 21:20 29:21 30:1 10:15,22 33:6,14 34:1,7 45:25 90:6 22:6 3:1 11:23 37:16 92:17 7:9 126:4 26:2,6,8 11	•	5		97:11,16	carefully
86:18,19 92:8 96:2 98:24 99:7 109:24 cart 23:25 86:19,21 98:4 105:5 99:21 110:6 case1:6 86:24 87:9 113:3,7 102:23 121:14 26:13,21 88:5,6,16 bend 68:24 104:15 51:23 38:20 89:2,6,9 70:2,3 105:12,18 3:10 47:19 89:10,11 benign 109:18 bring 65:6 casing 25:21 89:23,90:5 Bennett3:10 broad 24:17 25:23 26:3 92:21,25 93:6 94:23 72:5 best 70:15 113:25 broader 55:4 broader 55:4 broader 55:4 broke 9:10 25:23 26:3 95:3,18,23 80:20 120:5,10 33:13,15 42:20 33:7 30:19 55:18 103:18,20 104:10,13 3:16 6:9 122:6 63:14 80:8 108:20 106:12,20 25:29 27:10 28:25 better 14:15 built 12:9 91:17 10:15,22 33:6,14 34:1,7 45:25 90:6 22:6 31 7:9 126:4 46:13,17 11:1:23 37:16 92:17 7:9 126:4 26:2,6,8 <th>85:25 86:2</th> <td>85:18 86:4</td> <td>97:12</td> <td>97:18,20</td> <td>117:22</td>	85:25 86:2	85:18 86:4	97:12	97:18,20	117:22
86:19,21 98:4 105:5 99:21 110:6 case1:6 86:24 87:9 113:3,7 102:23 breaking 26:24 88:5,6,16 104:15 51:23 38:20 88:20,21 bend 68:24 104:15 51:23 38:20 89:10,11 benign 108:16 3:10 47:19 89:23 90:5 benign 109:18 bring 65:6 casing 25:21 89:23 90:5 bent 70:15 113:25 broader 55:4 broke 9:10 25:23 26:3 92:21,25 bent 70:15 113:25 broke 9:10 25:23 26:3 93:6 94:23 72:5 114:9 broke 9:10 55:18 95:3,18,23 80:20 120:5,10 33:13,15 category 102:11 104:21 120:24 43:25 55:4 59:4 103:18,20 3:16 6:9 124:16 better 14:15 building caught 29:3 107:1 28:25 27:10 124:16 better 14:15 built 12:9 built 2:9 11:26,19 37:16 92:17 7:9 126:4 26:2,6,8 11:27 49:2,6,10	86:18,19	92:8 96:2	98:24 99:7	1	cart 23:25
86:24 87:9 113:3,7 102:23 121:14 26:13,21 88:5,6,16 bend 68:24 104:15 38:20 89:2,6,9 70:2,3 105:12,18 39:25 89:10,11 benign 108:16 3:10 47:19 89:23 90:5 Bennett3:10 bent 70:15 113:25 broad 24:17 25:23 26:3 92:21,25 best 8:8 119:4,12 14:20 33:7 33:17 categories 95:3,18,23 best 8:8 119:4,12 14:20 33:7 104:19 101:16,21 80:20 120:5,10 33:15 categories 103:18,20 80:20 122:6 63:14 80:8 108:20 107:1 28:25 124:16 better 14:15 12:8 cause 18:21 107:1 28:25 15:6 built 12:9 bulk 21:20 cause 18:21 11:13,21 35:12 36:9 37:16 22:17 7:9 126:4 26:2,6,8 112:22 40:21 42:2 102:17 7:9 126:4 26:2,6,8 113:15,16 49:2,6,10 binding 76:9 26:14,16 15:14,24 50:	86:19,21	98:4 105:5	99:21	110:6	case1:6
88:5,6,16 114:14 bend 68:24 104:15 51:23 38:20 89:2,6,9 70:2,3 105:12,18 38:20 39:25 89:10,11 benign 108:16 3:10 47:19 89:16,19 122:13 109:18 bring 65:6 casing 25:21 89:23,90:5 Bennett 3:10 110:8 broad 24:17 broader 55:4 categories 93:6,94:23 72:5 114:9 broke 9:10 104:19 category 55:18 104:19 101:16,21 104:21 120:24 43:25 category 55:4 59:4 104:19 102:11 104:21 120:24 43:25 63:14 80:8 108:20 104:19 category 55:4 59:4 108:20 104:19 category 55:4 59:4 108:20 104:19 category 55:4 59:4 108:20 108:20 108:20 108:20 108:20 108:20 108:20 108:20 108:20 108:20 108:20 108:20 108:20 108:20 108:20 108:20 108:20 108:20 108:21 108:21	The state of the s		102:23	1	
88:20,21 bend 68:24 104:15 51:23 38:20 89:2,6,9 70:2,3 105:12,18 39:25 89:10,11 benign 108:16 3:10 47:19 89:23,90:5 Bennett3:10 bring 65:6 casing 25:21 89:23,25 bent 70:15 113:25 broad 24:17 25:23 26:3 93:6,94:23 72:5 114:9 broke 9:10 25:23 26:3 95:3,18,23 80:20 120:5,10 33:13,15 categories 95:3,18,20 80:20 120:5,10 33:13,15 category 104:11 104:21 120:24 43:25 55:4 59:4 104:10,13 3:16 6:9 122:6 63:14 80:8 108:20 107:1 28:25 124:16 better 14:15 bulk 21:20 cause 18:21 107:1 28:25 33:6,14 34:1,7 45:25 90:6 62:13 46:13,17 111:23 37:16 92:17 7:9 126:4 26:2,6,8 112:24 40:21 42:2 102:17 7:9 126:4	88:5,6,16		i		
89:2,6,9 70:2,3 105:12,18 Bricklin 39:25 89:10,11 122:13 109:18 3:10 47:19 89:23 90:5 Bennett 3:10 10:8 bring 65:6 casing 25:21 92:21,25 bent 70:15 113:25 broader 55:4 categories 93:6 94:23 72:5 114:9 broke 9:10 55:18 95:3,18,23 best 8:8 119:4,12 14:20 33:7 104:19 101:16,21 80:20 120:5,10 33:13,15 category 102:11 104:21 120:24 43:25 55:4 59:4 103:18,20 Betke 3:15 121:6 63:14 80:8 108:20 104:10,13 3:16 6:9 122:6 building caught 29:3 106:12,20 25:9 27:10 124:16 12:8 caught 29:3 107:1 28:25 15:6 better 14:15 built 12:9 91:17 11:13,21 35:12 36:9 34:1,7 62:6 62:6 62:14 45:6 11:23 36:21 37:3 34:1,7 62:6 62:6 62:1,6 62:1,6 11:25,10			· ·		
89:10,11 benign 108:16 3:10 47:19 89:23 90:5 Bennett3:10 110:8 bring 65:6 casing 25:21 92:21,25 bent 70:15 113:25 broader 55:4 categories 95:3,18,23 best 8:8 119:4,12 14:20 33:7 104:19 101:16,21 80:20 120:5,10 33:13,15 category 102:11 104:21 20:24 43:25 55:4 59:4 103:18,20 3:16 6:9 122:6 63:14 80:8 108:20 104:10,13 3:16 6:9 122:6 building caught 29:3 106:12,20 25:9 27:10 124:16 better 14:15 built 12:9 91:17 108:12 29:21 30:1 35:12 36:9 34:1,7 55:10 46:13,17 111:23 36:21 37:3 34:1,7 50:16 50:18 62:6 3:1 112:6,19 37:16 92:17 62:6 3:1 62:6 3:1 113:15,16 49:2,6,10 50:4 76:9 36:3,4,6 115:11,13 49:2,6,10 50:4 76:9 36:3,4,6 115:14,24 50:18 109:4 40:7 46:14,16 116:3 51:21 50:15:15:11 33:16 56:7 50:24 87:9	1				
89:16,19 122:13 109:18 bring 65:6 casing 25:21 89:23 90:5 Bennett 3:10 110:8 broad 24:17 25:23 26:3 92:21,25 72:5 114:9 broader 55:4 categories 95:3,18,23 best 8:8 119:4,12 14:20 33:7 104:19 101:16,21 80:20 120:5,10 33:13,15 category 102:11 104:21 120:24 43:25 55:4 59:4 103:18,20 3:16 6:9 122:6 building caught 29:3 104:10,13 3:16 6:9 122:6 building cause 18:21 107:1 28:25 better 14:15 better 14:15 built 12:9 91:17 108:12 29:21 30:1 35:12 36:9 34:1,7 55:10 46:13,17 111:23 36:21 37:3 45:25 90:6 52:17 7:9 126:4 cell 45:6 112:6,19 37:16 92:17 7:9 126:4 cells 25:22 113:15,16 49:2,6,10 binding 76:9 36:3,4,6 115:11,13 49:17,22 109:4 40:7 46:14,16 16:3 </td <th></th> <td>1</td> <td></td> <td></td> <td></td>		1			
89:23 90:5 Bennett 3:10 bent 70:15 110:8 last 25 last 25 last 25:23 26:3 broad 24:17 broader 55:4 last 25:18 la	1				
92:21,25 bent 70:15 113:25 broader 55:4 categories 93:6 94:23 72:5 114:9 55:18 95:3,18,23 best 8:8 119:4,12 14:20 33:7 101:16,21 80:20 120:5,10 33:13,15 102:11 104:21 120:24 43:25 103:18,20 Betke 3:15 121:6 63:14 80:8 108:20 104:10,13 3:16 6:9 122:6 building caught 29:3 106:12,20 25:9 27:10 124:16 better 14:15 built 12:9 91:17 108:12 29:21 30:1 15:6 beyond 32:18 bulk 21:20 91:17 111:23 33:6,14 34:1,7 105:10,16 106:1,6 112:24 40:21 42:2 102:17 7:9 126:4 26:2,6,8 113:1,11 48:3,11 110:17 cable 66:12 31:5 35:3 115:11,13 49:2,6,10 binding 76:9 44:14 115:14,24 50:18 15:7 40:7 46:14,16 115:17,20		1		_	
93:6 94:23 72:5 114:9 broke 9:10 14:20 33:7 95:3,18,23 80:20 120:5,10 33:13,15 category 102:11 104:21 120:24 43:25 55:4 59:4 103:18,20 Betke 3:15 121:6 63:14 80:8 108:20 104:10,13 3:16 6:9 122:6 building caught 29:3 106:12,20 25:9 27:10 124:16 better 14:15 builk 21:29 91:17 108:12 29:21 30:1 15:6 bulk 21:20 91:17 100:15,22 33:6,14 34:1,7 65:25 90:6 46:13,17 111:23 36:21 37:3 34:1,7 65:25 90:6 62:6 3:1 106:1,6 112:6,19 37:16 92:17 7:9 126:4 26:2,6,8 113:1,11 48:3,11 110:17 26:2,6,8 31:5 35:3 113:15,16 49:2,6,10 109:4 40:7 46:14,16 115:14,24 50:18 15:7 20:4 40:7 46:14,16 116:3 51:21 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9		i			
95:3,18,23 best 8:8 119:4,12 14:20 33:7 104:19 101:16,21 80:20 120:5,10 33:13,15 category 102:11 104:21 120:24 43:25 55:4 59:4 103:18,20 Betke 3:15 121:6 63:14 80:8 108:20 104:10,13 3:16 6:9 122:6 building caught 29:3 106:12,20 25:9 27:10 124:16 better 14:15 built 12:9 91:17 108:12 29:21 30:1 15:6 beyond 32:18 bus 12:15 46:13,17 111:13,21 35:12 36:9 34:1,7 52:6 52:17 105:10,16 112:24 40:21 42:2 40:21 42:2 7:9 126:4 26:2,6,8 113:1,11 48:3,11 49:2,6,10 49:1,7,22 76:9 36:3,4,6 115:11,13 49:17,22 109:4 40:7 46:14,16 116:3 51:21 51:21 52:11 53:2 33:16 56:7 77:19 67:8 50:24 87:9					_
101:16,21 80:20 120:5,10 33:13,15 category 102:11 104:21 120:24 43:25 55:4 59:4 103:18,20 Betke 3:15 121:6 63:14 80:8 108:20 104:10,13 3:16 6:9 122:6 building caught 29:3 106:12,20 25:9 27:10 124:16 better 14:15 built 12:9 91:17 108:12 29:21 30:1 15:6 bulk 21:20 cell 45:6 10:15,22 33:6,14 beyond 32:18 bus 12:15 46:13,17 11:13,21 35:12 36:9 34:1,7 C 105:10,16 112:6,19 37:16 92:17 C C2:6 3:1 cells 25:22 112:22 40:21 42:2 102:17 7:9 126:4 cells 25:22 113:1,11 48:3,11 110:17 cable 66:12 31:5 35:3 115:11,13 49:2,6,10 binding 76:9 36:3,4,6 115:14,24 50:18 15:7 called 7:12 47:22 116:3 51:21 33:16 56:7 7:19 67:8 50:24 87:9					
102:11 104:21 120:24 43:25 55:4 59:4 103:18,20 Betke 3:15 121:6 63:14 80:8 108:20 104:10,13 3:16 6:9 122:6 building caught 29:3 106:12,20 25:9 27:10 124:16 built 12:9 91:17 108:12 29:21 30:1 15:6 bulk 21:20 cell 45:6 10:15,22 33:6,14 34:1,7 105:10,16 105:10,16 11:23 36:21 37:3 34:1,7 105:10,16 106:1,6 112:20 40:21 42:2 102:17 7:9 126:4 cells 25:22 113:1,11 48:3,11 10:17 cable 66:12 31:5 35:3 113:15,16 49:2,6,10 binding 76:9 36:3,4,6 115:11,13 49:17,22 109:4 call 29:8 44:14 116:3 51:21 bit 9:11 called 7:12 47:22 117:15,20 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9					
103:18,20 Betke 3:15 121:6 63:14 80:8 108:20 104:10,13 3:16 6:9 122:6 building caught 29:3 106:12,20 25:9 27:10 124:16 built 12:9 cause 18:21 107:1 28:25 better 14:15 built 12:9 91:17 108:12 33:6,14 beyond 32:18 46:13,17 111:13,21 35:12 36:9 34:1,7 45:25 90:6 62 112:6,19 37:16 92:17 105:10,16 106:1,6 112:22 40:21 42:2 102:17 7:9 126:4 26:2,6,8 113:1,11 48:3,11 10:17 cable 66:12 31:5 35:3 115:11,13 49:2,6,10 109:4 40:7 44:14 115:14,24 50:18 115:7 40:7 46:14,16 116:3 51:21 51:21 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9					
104:10,13 3:16 6:9 122:6 building caught29:3 106:12,20 25:9 27:10 124:16 better14:15 12:8 pl:17 107:1 28:25 better14:15 built12:9 pl:17 108:12 33:6,14 beyond 32:18 bus 12:15 cell 45:6 11:13,21 35:12 36:9 34:1,7 55:25 90:6 cell 45:6 46:13,17 11:23 36:21 37:3 34:1,7 55:25 90:6 cells 25:22 60:10,16 112:6,19 37:16 92:17 7:9 126:4 cells 25:22 26:2,6,8 113:1,11 48:3,11 10:17 cable 66:12 31:5 35:3 36:3,4,6 115:11,13 49:17,22 binding 76:9 36:3,4,6 115:14,24 50:18 10:4 40:7 46:14,16 116:3 51:21 bit 9:11 50:24 87:9 17:19 67:8 50:24 87:9					
106:12,20 25:9 27:10 124:16 12:8 cause 18:21 107:1 28:25 better 14:15 built 12:9 91:17 108:12 29:21 30:1 15:6 bulk 21:20 cell 45:6 110:15,22 33:6,14 beyond 32:18 bus 12:15 46:13,17 111:23 35:12 36:9 34:1,7 105:10,16 106:1,6 112:6,19 37:16 92:17 C2:6 3:1 106:1,6 112:22 40:21 42:2 102:17 7:9 126:4 26:2,6,8 113:1,11 48:3,11 110:17 cable 66:12 31:5 35:3 113:15,16 49:2,6,10 binding 76:9 36:3,4,6 115:11,13 49:17,22 109:4 40:7 46:14,16 115:3 51:21 bit 9:11 called 7:12 47:22 117:15,20 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9					
107:1 28:25 better14:15 built12:9 91:17 108:12 33:6,14 33:6,14 beyond 32:18 46:13,17 111:13,21 35:12 36:9 34:1,7 105:10,16 111:23 36:21 37:3 45:25 90:6 C 106:1,6 112:6,19 37:16 92:17 C2:6 3:1 106:1,6 112:22 40:21 42:2 102:17 7:9 126:4 26:2,6,8 113:1,11 48:3,11 110:17 26:2,6,8 31:5 35:3 113:15,16 49:2,6,10 49:17,22 76:9 36:3,4,6 115:11,13 49:17,22 109:4 21129:8 44:14 115:14,24 50:18 115:7 40:7 46:14,16 116:3 51:21 51:21 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9				_	
108:12 29:21 30:1 15:6 bulk 21:20 cell 45:6 110:15,22 33:6,14 34:1,7 45:25 90:6 6 46:13,17 111:23 36:21 37:3 34:1,7 105:10,16 106:1,6 112:6,19 37:16 92:17 C2:6 3:1 cells 25:22 112:22 40:21 42:2 102:17 7:9 126:4 cells 25:22 113:1,11 48:3,11 110:17 cable 66:12 31:5 35:3 113:15,16 49:2,6,10 109:4 36:3,4,6 115:14,24 50:18 109:4 40:7 44:14 116:3 51:21 bit 9:11 called 7:12 47:22 117:15,20 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9	1				cause 18:21
110:15,22 33:6,14 beyond 32:18 46:13,17 111:13,21 35:12 36:9 34:1,7 105:10,16 111:23 36:21 37:3 45:25 90:6 C 106:1,6 112:6,19 37:16 92:17 C2:6 3:1 cells 25:22 112:22 40:21 42:2 102:17 7:9 126:4 26:2,6,8 113:1,11 48:3,11 110:17 cable 66:12 31:5 35:3 113:15,16 49:2,6,10 binding 76:9 36:3,4,6 115:11,13 49:17,22 109:4 40:7 44:14 116:3 51:21 bit 9:11 called 7:12 47:22 117:15,20 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9	1			built 12:9	91:17
111:13,21 35:12 36:9 34:1,7 —			15:6	bulk 21:20	cell 45:6
111:13,21 35:12 36:9 34:1,7 —	110:15,22	33:6,14	beyond 32:18	bus 12:15	46:13,17
111:23 36:21 37:3 45:25 90:6 C 106:1,6 112:6,19 37:16 92:17 C2:6 3:1 cells 25:22 112:22 40:21 42:2 102:17 7:9 126:4 26:2,6,8 113:1,11 48:3,11 110:17 cable 66:12 31:5 35:3 113:15,16 49:2,6,10 binding 76:9 36:3,4,6 115:11,13 49:17,22 109:4 40:7 44:14 116:3 51:21 bit 9:11 called 7:12 47:22 117:15,20 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9	1	•	. –		
112:6,19 37:16 92:17 C2:6 3:1 cells 25:22 112:22 40:21 42:2 102:17 7:9 126:4 26:2,6,8 113:1,11 48:3,11 110:17 cable 66:12 31:5 35:3 113:15,16 49:2,6,10 binding 76:9 36:3,4,6 115:11,13 49:17,22 109:4 40:7 44:14 115:14,24 50:18 115:7 40:7 46:14,16 116:3 51:21 bit 9:11 called 7:12 47:22 117:15,20 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9	1			C	
112:22 40:21 42:2 102:17 7:9 126:4 26:2,6,8 113:1,11 48:3,11 110:17 cable 66:12 31:5 35:3 113:15,16 49:2,6,10 binding 76:9 36:3,4,6 115:11,13 49:17,22 109:4 call 29:8 44:14 115:14,24 50:18 115:7 40:7 46:14,16 116:3 51:21 bit 9:11 called 7:12 47:22 117:15,20 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9	1		1	C2:6 3:1	'
113:1,11 48:3,11 110:17 cable 66:12 31:5 35:3 113:15,16 49:2,6,10 binding 76:9 36:3,4,6 115:11,13 49:17,22 109:4 call 29:8 44:14 115:14,24 50:18 115:7 40:7 46:14,16 116:3 51:21 bit 9:11 called 7:12 47:22 117:15,20 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9	1				
113:15,16 49:2,6,10 binding 76:9 36:3,4,6 115:11,13 49:17,22 109:4 call 29:8 44:14 115:14,24 50:18 115:7 40:7 46:14,16 116:3 51:21 bit 9:11 called 7:12 47:22 117:15,20 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9	1			3	
115:11,13		'	1		
115:14,24 50:18 115:7 40:7 46:14,16 116:3 51:21 bit 9:11 called 7:12 47:22 117:15,20 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9			_		
116:3 51:21 bit 9:11 called 7:12 47:22 117:15,20 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9					
117:15,20 52:11 53:2 33:16 56:7 17:19 67:8 50:24 87:9					-
117.24 55:10 55:2 106:10 86:1 92:25			ł	i i	
	1 1 1 2 4	33:10 33:2	100:10	00:1	92:25
			l	<u> </u>	

				Page 5
	05.25	144.12	71.16	01-10-05
controlled	95:25	44:13	71:16	21:10,25
117:23	105:2	45:14,16	76:14 99:2	50:1 77:10
controller	107:23	45:20 47:1	99:17	90:24
32:17,22	115:1	47:4,7,11	108:22	108:21
32:24	correctly	47:23,25	112:3	118:11,23
44:13 47:6	93:2	50:25 54:8	114:18	119:1,10
47:13	122:14	67:19,24	126:7	120:3
73:20 75:4	Coughlin	68:11	day 29:7	125:2
80:1 89:11	3:16	72:16	32:3 93:8	126:8,10
89:12 90:8	couldn't	92:24	126:22	depositions
90:10,13	44:8 103:9	93:11	DC 67:20	126:17
94:1	counsel 3:7	112:6,16	116:22	describe
111:13,14	3:13,19	112:18	DC-002EA 5:7	14:10
112:20	7:4 21:8	117:22	91:1	16:12
controls	51:15 52:7	118:1	deal 37:7	18:15
81:10 84:2	126:15,19	123:5	debug 13:8	44:10
92:18	COUNTY 126:2	Curriculum	13:16	45:19 46:2
117:25	couple	18:2	17:23	48:8 54:10
copper 68:18	121:17	curve 42:5	debugging	54:14
cord 70:1	court1:1	custom 12:13	16:21	58:15 71:2
cords 100:9	2:7 52:4	customer	December	80:3 81:4
100:13	52:15	17:20,21	126:22	83:21
corporation	65:22	18:6,19	default	87:22
12:25 13:3	126:25	cut 79:17	70:21	91:23
15:24	Cox 2:10 3:4	84:6,11	Defendant	103:19
38:25 39:3	CPU 75:14	112:12	1:10 3:13	104:11
40:1 109:5	79:4 81:24	cycle 114:16	3:19 57:24	122:16
correct	84:1,3,8	cycles 86:25	Defendant's	described
13:19	88:1 92:4	87:5 113:2	5:8 118:13	40:20 41:2
14:24	110:22	113:13,14	define 68:5	42:7,10
23:20	111:5,16	113:23	degree	43:6 46:4
25:24,25	111:24		122:17	68:8 83:23
31:3 36:16	create 14:8	D	degrees 90:1	91:25
37:15	created 14:9	D 4:1 7:9	90:2,7,17	describes
38:18	14:12	19:16	delayed	41:1
41:21	creating	damaged	99:22	DESCRIPTION
42:19,22	14:5	73:11	deliver	5:4
49:5,16,21	criteria	dash 100:22	67:19	design 15:25
51:20	116:4	database	delta 116:15	16:4,10
55:23	critical	124:3	department	17:14 31:1
60:25	91:16,22	databases	43:2	31:2 35:8
62:20	91:24 92:6	23:11	depicted	35:24 36:2
66:23	92:13	Dated 126:22	66:8 69:3	36:4,23
70:11,17	cross 55:10	David 1:13	76:9	37:8 38:1
71:1 72:17	CT 23:9,25	2:3 4:3	depiction	38:22
72:18	CTP 63:9	7:11,21	76:17	39:14,19
75:19	97:3	21:5 22:17	deposition	40:6 41:3
76:11 78:7	curious	29:23	1:12 2:1	41:12,13
82:23	85:12	31:25	5:12 7:23	42:10,15
91:20	current 8:20	51:11 55:3	20:16	48:4,7,16
L				

				Page 7
	1	1		1
event 91:18	18:22	first7:13	80:21	60:4,9
exact 44:8	fair 103:3,5	9:20 11:19	found 88:7	62:16 96:6
62:24	familiar	11:21 13:2	88:22	96:21
exactly 80:4	26:7	42:5 63:14	foundation	98:25
87:22	Familiar	123:16	71:13	122:18
EXAMINATION	60:14	fit 103:10	four 9:7	given 126:11
4:4 7:16	fan 84:1	106:14,21	91:9	gives 83:8
examined	87:14,14	107:2,12	free 115:15	go 16:25
46:18	92:5 far 68:16	five 9:16	116:7	17:24
example 69:21	fault 73:8	65:14 91:9	Friday 2:10	25:11
[flip 60:10	3:4	28:24
exchanged 81:23	feature	flow 45:14	front 42:25	48:17
excuse 27:11	83:12,21 features	45:16,20	99:18	50:17
exhibit 5:1	85:8 91:19	focusing 68:14	full 7:20 116:1	57:22
69:13 77:8				62:17
77:11	92:2,15,22 93:9,16,23	FOLLOWING 7:12	fully 46:1 48:8	64:18
90:22,25	Fed.R.Civ.P	7:12 FOLLOWS 7:14	126:14	71:14,16
99:6 118:9	22:1	force 69:14	function	76:14
118:12,24	Federal 3:17	forced 92:9	91:16,24	78:13 81:15 96:8
119:11	feel 96:17	92:10	92:7,14	103:7
121:19	field 11:2	foregoing	103:11	
123:3	figure 76:10	126:8	function	105:4,7,9 106:4
exhibits	105:21	forget 69:23	70:8,13	100:4
21:9	filing 7:6	forgive 83:4	further	110:9
existed 86:9	final 30:24	forgot 52:14	92:20	111:10
experience	financially	form 5:7	124:14	114:2,10
17:20 18:6	126:20	22:16 23:4	126:18	114:10
19:23	find 12:8	28:9 31:24	fuse 43:18	goes 80:22
experienced	46:21 51:9	31:25 35:2	43:18	84:10
87:1	85:14	51:17 52:9	future 18:24	89:13 90:3
expert 56:1	96:11	61:19 71:8		90:6
56:23	123:1	72:23	G	102:16
experts 94:8	124:5	75:21,24	G 7:9	going 20:6
Explain	fine 29:20	76:14 82:1	gained 71:4	35:1 40:22
74:12	42:6 45:19	83:17 88:9	gears 56:6	41:17 47:8
external	96:14	90:25	106:10	56:6,15,16
46:16	114:24	106:17	general 32:3	65:1 83:9
eye 52:16	115:6	107:14	45:20 46:4	91:7 97:6
	120:21	108:15	87:24	97:11 99:9
F	finish 8:15	111:1	111:6,9,11	102:21
facility	8:17	112:1	generally	106:9
16:25	finished	114:1	22:13	108:17
factory	101:4	115:21	43:19	118:7
84:17	fire 96:4	117:6	44:10 72:2	120:21
87:15	firmware	formal 19:25	89:3	121:7
fail 47:14	73:19	format 23:19	getting	good 7:19
122:12	74:24,25	23:22	53:22,23	50:16 65:1
fails 115:13	75:3 79:25	34:20	give 14:15	65:3,18
failure	93:24	forward	44:8 49:7	97 : 17

				Page 9
70:19	126:2		involved	
70:19	i e	integration		K
72:14 73:6	indicate 87:25	43:8	18:18	keep 25:4
1	indicated	interact	31:12 58:9 105:5	41:7 91:6
74:3,19 94:1	50:21	72:20 73:2		97:6,11
	74:21	73:10 75:2	ion 20:13	kind 12:11
idea 65:3	1	110:13	24:3,4,11	18:3 24:16
identifi	indicating	interacts	24:25	know8:6,10
77:14 91:3	92:17	74:20	25:16	30:24 35:2
118:17	indicator	intercon	92:25	35:6 36:5
119:2	86:23	45:23	122:10	37:7 41:21
identified	individual	interested	iPhone 83:7	44:9 45:8
5:4 22:14	87:9	111:21	isn't117:18	46:16
23:1,6	123:10	126:20	issue 26:13	51:25
26:6 28:14	industry	interface	44:25	55:13,17
32:12	10:2 106:4	14:13	95:20 98:8	56:16
72:15	information	interfacing	98:15	57:24
118:3	26:11,19	81:18	it's 9:21	58:12,17
identifies	31:9 44:15	interjected	18:13	59:10
68:8	53:17 56:8	120:11	50:13	63:13,19
identify	62:21 63:3	internal	57:10 65:3	64:3,4,21
26:1,2,23	64:7 71:4	17:6,9	86:25	64:22 65:7
27:2 31:20	71:19	46:8,10,12	104:23	66:13
31:21	74:19	46:13,15	J	80:11
32:10	81:17,22	68:17		81:21 83:4
67:10,22	85:15	86:20	job 11:18,19	83:6 84:20
75:6 87:18	86:15	106:2	11:21,25	85:9 86:16
93:22	90:15 93:5	interposer	12:16,22	86:17
94:21	initial	14:12	13:1,6,20	94:13
identifying	34:14	Interrog	13:24	100:12
18:20	74:15	5:10 57:17	15:20	102:8
imbedded	inputs	58:13	17:15 18:6	105:16
73:20 75:4	110:21	77:18	18:8,12,15	115:3,17
imperative	insert 69:12	118:8,15	19:1,10,20	116:2,11
8:2	inside 25:23	119:9	20:1,9	121:25
impolite	47:19	121:21	Josh 27:11	122:20
58:22	68:11	Interrog	27:16 29:1	123:22,24
important	70:20	83:24 91:8	35:16 41:9	knowing
8:4,9	73:19 80:1	93:13 99:5	48:13 53:3	108:11
39:10 41:6	90:8	99:12	55:3 56:17	knowledge
104:23	insight	119:6	58:21	55:11
incident	14:16	123:15	80:11	103:1
34:12	installed	interrupt	82:14 94:3 96:8	108:19,23
56:10 93:8	12:5	47:1,4,11	1	109:3,11
119:23 included	Institute	47:24,25	102:24 114:5,19	109:20
85:19	10:16,18 instruction	51:1	120:14	114:21
95:19	97:2	Inventec	120:14	known 26:8
including	instruct	38:25 39:3 40:1	JOSHUA 3:3	knows 55:5,7
74:22	94:22	investig	Judge 50:12	Т
INDIANA	95:16	58:6,10	Judge 50.12	L
	JU. 10] 50.0,10		L7:1
	I	l	l	I

				Page 11
	40:10 41:5	116:5	92:23	need 8:7
<u>M</u>	40:10 41:5	memory 48:15	92:23	
MA 3:18	-	· —	l .	48:20,21
machine	42:9 108:7	mentioned	monitored	50:22
34:11	mark 77:6	113:12	40:6	123:1
Magnolia	90:21	115:10	monitoring	neither
8:25	118:7,21	116:3	39:23	126:15
maintained	marked 77:13	mentions	40:19,23	night 21:7
70 : 6	91:2	123:16	41:1 47:7	nine 77:25
making 31:13	118:16	merger 17:17	monitors	78:3
70:18 74:4	119:1	message 23:8	42:15	nod 8:11
malfunct	123:3	23:24	43:20	nomencla
82:17	marking 95:9	70:21 73:5	morning 7:19	29:2
management	119:8	83:8	mother 14:4	nominal
92:4	markings	messaging	motion 51:18	54:15
Manager	26:7,25	74:3	52:10	non-appr
19:21	34:16,19	metal 68:18	mouse 85:14	83:1
manages	match 62:15	Michael 3:9	mouth 80:13	non-HP82:10
32:24 40:8	62:24 63:3	114:3	move 17:19	108:13
	80:13	Mike 71:7	69:4	nonfunct
manner 122:13	material	75:22	moved 13:14	91:19
	50:9 68:16	milliamps	15:22 16:3	92:15
manufacture	matter 51:14	54:9	69:5,7,10	normal 24:8
30:15,22	maximum 54:1	mind 35:16	69:10,15	73:12
31:22	54:2,5,7	78:11	movements	normally
32:11,14	123:5,5	109:15	80:13	32:7 35:9
36:24	McFarland	minute 65:15	moving 91:6	38:7,8
104:18	2:10 3:5	minute 63:13		
manufact	mean 14:10	120:22	multiple	39:5,20
28:5 37:2	16:12	1	28:23 35:7	42:16 45:4
38:15		121:1	44:21,22	71:19
40:14 69:6	23:17 35:3	missed 95:8	47:24 61:2	Notary 2:7
73:12	37:1 41:21	misunder	74:21	126:4
86:11	53:6,12	27:14	N	note 49:25
manufact	54:23	model 25:4		96:9,19
37 : 20	60:23	58:17	N3:1 4:1	notebook
38:20 , 23	61:22	59:21 61:2	7:1,9	15:24 16:1
39:25	71:10 72:2	61:6,7	name 7:20	16:3,10,11
40:18	85:24	62:16,17	9:17,20	17:14 24:8
manufact	86:21	62:24	10:15	24:19 27:3
31:12,17	98:11	64:11,16	19:16,18	27:4 28:16
32:19 98:1	102:19	81:14	42:25	29:13,16
98:6 99:13	112:12	98:19	100:21	30:8,17,21
107:10,18	measurem	102:5,8	names 17:11	31:7,15
•	112:14	models 98:21	NATIONAL	32:8 33:1
TUR:R	mechanical	moment 65:9	3:19	33:3,22
108:8		i	near 83:5	34:23
manufact	66:11 70:5	110:1	mear ob. b	74.27
manufact 28:7 30:6		110:1 monitor 40:5	necessarily	35:11,23
manufact 28:7 30:6 31:5	66:11 70:5	l		35:11,23
manufact 28:7 30:6 31:5 manufact	66:11 70:5 76:18,21	monitor 40:5	necessarily	35:11,23 36:13,19
manufact 28:7 30:6 31:5 manufact 30:12	66:11 70:5 76:18,21 76:25	monitor 40:5 40:15	necessarily 109:10	35:11,23 36:13,19 37:25 38:9
manufact 28:7 30:6 31:5 manufact	66:11 70:5 76:18,21 76:25 mechanic	monitor 40:5 40:15 42:20 79:6	necessarily 109:10 123:10	35:11,23 36:13,19

				Page 13
	l	I	l	
31:13,19	104:24	percent	67:17 68:1	15:18,22
32:6,25	pages 60:17	64:13	71:5	16:8 17:15
33:2,21	61:7,14	116:1	Pipho 1:13	17:19,25
35:3,21,25	62:7	perfectly	2:3 4:3	20:5 69:6
36:12,18	paper 34:18	73:11	7:11,21,22	positive
37:20,24	paragraph	permit 75:17	126:7	43:14
1	77:24	personal		
38:6,14,20	i	j -	Pittsburgh	possible
39:4,8,19	92:19	8:21,23	2:11 3:6	62:23 63:7
42:16 43:4	121:22	69:20	3:12	69:18
43:12,22	122:2,3	108:18	place 33:8	84:13
44:2 46:12	123:16	109:2	Plaintiff	possibly
46:21 47:6	parameters	114:21	1:6 2:4	108:12
47:9,19,22	122:23	photo 56:11	3:7	power1:5
48:10 51:2	123:13	photograph	Plaintiff's	24:7 29:6
52:23	124:8	56:20		
	1		5:9 21:8	32:2 45:22
54:11	part 31:21	57:12	57:16 77:7	56:9 58:1
58:23	32:13 42:5	photographs	90:21	58:16
59:16 79:5	63:15	34:15	118:8,14	63:21 67:7
79:15,22	71:12	46:19 56:8	119:9,11	67:10,14
80:2,5	93:12,24	94:6,7,15	121:19,20	67:18,20
81:6,24	95:8 105:6	94:17	123:3	70:22 73:7
87:10	120:6	physical	plant 30:12	75:19 76:1
89:16 90:5	particular	38:14	plastic	76:8 84:5
92:22 93:7	13:12	39:12	25:21 26:3	84:6,11
94:23 95:3	23:18 25:3	physically	123:18,23	1
95:18,23			-	92:12 93:7
1	26:9 28:10	30:11	124:2	97:23
101:16,21	51:2 75:9	93:22	plating	100:9,12
102:11	103:13	PI 32:17,20	68:19,21	116:2
103:18,20	108:23	picture 95:2	please 7:20	Power's
104:10,13	112:18	95:11	8:7 19:17	120:3
105:9	113:4,8	pictures	22:20	preparation
106:1	parties 4:6	26:14,22	33:17	20:16
110:23	7:5 35:7	46:23 93:5	35:16	present 3:21
112:22	126:16,19	93:14	41:20,25	93:17,23
118:2	parts 30:15	pin 67:2,2,3	63:16	pretty 9:6
123:8,9	30:19	67:10,10	75 : 22	_
· ·			1	18:7 77:24
packs 40:14	32:11 35:8	67:11,13	78:12,19	prevent 88:3
43:11	98:2	67:13,14	78:20	prevention
106:12,20	party 40:3	67:22 68:2	104:3	18:23
107:1	106:3	68:3,4,6,7	plugged	PREVIOUS
108:12	path 45:14	68:15,15	69:23,24	65 : 23
110:15	45:16,21	68:16,17	point 119:19	previously
113:1	45:25	68:23,23	pointed	68:7 70:15
page 5:1,3	67 : 20	69:2 70:2	53:11	117:12
6:1,3	PCB 47:18	70:8,13,19	portion	primarily
49:12,18	Pennsylv	72:14,14	58:11 67:1	14:11
53:14	1:3 2:9,11	72:14,14	position	17:21
54:19 66:9	· ·		_	
ŀ	126:1,5	73:9 74:3	13:13,14	18:18
67:1 96:19	people 14:25	74:20	13:17,21	19:25 75:6
96:22	15 : 3	pins 67:6,7	14:19,23	primary

				Page 15
75.12 00.4	(5.22		100 10	1 46 00
75:13 89:4	65:22	results	122:12	46:22
regulated 72:16	126:25	42:21	safety 40:1	52:16 58:2
i l	represen	résumé 18:3	60:18,19	58:4 67:2
regulation 81:11	40:12,17	retain	81:11 85:7	80:21
1	123:12	115:25	91:18 92:2	81:22 93:8
related	represented	review 20:15	92:15	96:10
126:16	116:19,24	20:18	103:17,19	109:24
relation	reproduc	21:24 22:6	104:9,12	120:23
43:12	1:23	22:10	105:10,17	121:25
relative	request	26:11,19	123:12	123:20
126:18	112:17	56:7 57:15	Saltzburg	seeing 57:7
released	requested	94:9 104:8	3:10	self-ext
40:10	103:15	reviewed	save 92:11	123:19
reliability	112:19	20:23	saw 120:14	sell 113:6
18:14,17	require	21:19 22:4	saying 8:6	send 84:4
remaining	16:17	26:14,22	27:24 52:1	sense 29:22
87:2	105:8	93:4,6	58:23,24	64:25
remember	requirem	right 10:21	59:8,9	sent 21:6
57:7	20:7	37:8,17	79:18	119:15
104:16	115:18	40:24	82:20 83:9	sentence
repair 13:8	requires	42:13	95:22	57:23 78:1
14:7	106:3	53:18,19	104:17	78:12,22
repairing	research	53:20 59:2	124:4	91:11,14
14:4	63 : 7	62:14 66:1	says 49:14	121:23
repeat 9:11	reservation	72:11 77:3	49:18	separate
9:20 14:21	51:16	95:12	91:15 96:3	41:8
22:8,20	reserve 52:7	96:17	122:9	104:19
35:17 44:1	resettable	100:24	schematic	separately
51:24	43:18	114:7,8,24	52:22	56:24
74:15	respect	119:13	53:12,16	sequence
79:19,19	25:10,13	121:11	school 10:5	23:14,18
80:9 88:17	36:11	123:7,11	10:6,9,22	serial 24:1
95:7	47:11	Road 2:10	Science 11:4	27:2 34:17
100:20	respective	3:5	scope 34:2,7	34:18
101:19	7:4	role 39:7,18	102:17,21	setting
106:22	responding	39:22	Scott 2:6	71:23
rephrase 8:7 replace 23:9	119:14	roles 18:9	126:4,25	seven 65:15
23:24 95:6	response 99:15	root 18:20	screen 81:16	91:10
95:10	103:2	roughly 114:15	82:10 85:15	ship 98:9,12
113:15	103:2	· -, -		98:19
115:14	120:16	Rules 2:5 run 14:14	sealing 7:6	100:10
116:7		117:3	second 27:12	101:8
report 60:18	responses 120:13	111:0	49:7 60:10	115:12
reported	responsible	S	98:25 secondary	shipped
89:6,11	14:3,5	s 3:1,3 7:1	84:2	29:12,15 30:7,16,20
112:17	16:1 30:25	7:9 112:17	section	31:7,14
reporter 2:7	42:24 43:4	safe 79:9	55:10	32:7,14
8:13 52:5	43:7,11	93:1	see 16:5	33:22
52:15	47:7	safely	22:2 27:23	34:23
""	± 1 • 1	1	۷۷.۷ ۷۱.۷	J4.4J
I			1	

				Page 1/
	1 00 10	1 42 10	l. .	1
subject	82:12	43:19	technicians	117:18
103:17,20	84:16,23	64:20 65:4	14:6 15:4	testify
104:9,14	86:6 88:19	65:12,14	15:11,15	108:18
successful	95:13	69:12,24	Technolo	109:2
92:18	96:24	77:17 85:6	11:24 12:1	testimony
Suite 3:11	98:10	96:10 97:6	technology	126:8,11
3:17	101:21	97:11,16	10:16,18	testing 16:9
summary	104:5	97:18	25:15 30:9	39:8,18,24
83:25	106:11,25	109:23	30:14,21	40:2 42:11
sun 83:7	109:22	120:22,25	36:1 37:21	103:17,19
supervisor	113:20	121:11	38:23	104:9,12
19:9,12	120:4,14	taken 2:3,5	tell 26:16	105:9,11
supplier	121:4	7:23 56:22	44:12	105:20
100:2	124:22	65:20 94:8	64:19	106:2,5
101:6	surveill	97:20	66:15 90:9	123:12
123:24	11:23,24	110:6	101:1	tests 36:20
suppliers	12:1,6,7	121:14	105:19	37:1
43:13	12:13	126:17	122:17	121:25
98:17	119:22	talk 64:21	temperature	122:4,9
106:1	suspect	103:16	43:14,20	Texas 8:25
123:25	53:12	talking	44:14 84:3	9:5 10:7
supply 75:19	sustain	25:19	84:10,15	Thank 42:3
76:8 84:5	123:20	28:10 29:4	85:1,6,21	50:19
support	switch 56:6	29:11	86:18 87:8	52:13
13:15	106:10	36:10,22	87:20 88:2	124:15,18
105:17	sworn 7:14	36:23	89:5,10,19	Thanks 21:16
Supported	126:9	37:23 38:1	89:25 90:4	that's 14:24
16:9	system 40:7	38:4,5,10	92:23	17:16 25:5
supporting	43:5,7	38:13	93:10	25:25
15:15	73:16,25	39:11	111:22	29:20
17:21	74:1,4,9	40:24 50:8		1
1	74:1,4,9	53:15,18	112:7,16	38:10 39:5
suppose 69:17	l e	70:24 77:7	temperat	41:16
i	87:19,24	l .	79:10 88:6	42:21 43:5
supposed	88:2 91:12	Tammy 9:18	88:22 89:2	45:19,24
72:3	91:15,17	9:21	ten 9:3	51:20 53:6
sure 9:13	92:1,7	TC 17:20	term 15:6	54:23
14:22	111:13	team 14:18	58:15	62:20,22
22:23	113:10	14:23 15:1	87:18 89:1	63:3 75:9
23:17	systems	15:3,6,8	terms 71:11	80:1,17
30:23	11:23 12:6	15:10,25	75:25	81:20 99:8
33:19	12:7,14	17:19 40:7	113:2	100:4
35:19 44:2	74:22	43:3,5,7	115:18	103:5
45:7 55:1	T	43:10 55:9	test 48:15	114:7,8,24
60:12 61:1		technical	124:9,9	115:6
61:12,14	T 7:1,1	10:14	tested 37:9	120:21
62:9 63:17	T-A-M-M-Y	technician	37:11 , 19	123:8,9
64:8,13	9:21	12:2,4	38:19,21	there's 35:7
68:19,25	table 69:25	13:5,7,11	testified	43:3,10,16
74:18	take 8:13	13:23 14:1	7:14 72:13	48:15
76:23	43:16,17	14:2	86:3 105:5	56:14
L		-	-	-

-				Page 19
117 1 0 4	100.05		F0 01] 4 1
117:1,2,4	120:25	6:4 21:4	52:21	x 4:1
117:11	124:18	21:13	54:25	Y
verbally	wanted 62:6	22:15 23:2	61:21 62:8	
8:10	104:22	25:1 28:8	62:19 64:5	yeah 38:5
versus 39:14	124:4	31:23	71:17	53:6 55:1
victor	wants 78:15	33:12,25	72:10,24	61:12
116:14,15	warning 73:4	34:6,25	74:13	64:24
video 8:1	82:9 96:3	50:10	76:16 78:8	71:10 85:3
119:22,24	warnings	51:10 52:2	79:1 82:2	99:8 100:4
view 81:16	94:21	54:17	83:18	105:8
87:8,14	95:15	61:18 71:9	84:22	106:9
Vitae 18:2	warranties	72:22	88:10,25	121:4
voice 80:14	113:7	75:23	96:1,20,25	122:5
voltage 54:3	warranty	76:12	97:7 99:24	year 12:17
54:6,15,16	113:3,4,8	81:25	103:8	12:18,19
64:13	113:9,10	83:16 88:8	105:14,23	12:20
92:24	115:11,19	88:23 99:1	106:18	15:19 16:2
93:11	116:6,9	99:19	107:6,15	20:4 113:7
111:22	wattage	102:15	108:1	113:9,10
112:6,19	67:23 68:9	106:16	110:10	115:11,14 115:19
116:22	72:15 75:7	107:4,13	111:2	115:19
117:21	watts 63:21	107:24	112:4	
118:1	116:21	108:14	114:12	years 9:3,7
122:19	117:1,2	110:25	117:7	10:8 11:6
123:6	way 41:18	111:25	126:7,10	11:8 13:13
voltages	42:14	114:17,25	126:12	19:4
79:10	49:23 63:2	115:20	won't103:1	you're 38:13 39:11
122:11	64:17	117:5	108:2	66:19
volts 54:4,6	73:12	119:7 121:8	wondering 109:13	69:15
64:10,14	93:15,22			09.13
vs 1:7	ways 43:16 we'll 63:23	went10:21	word103:23 words71:22	Z
W		66:14		zero 90:1
waived7:7	80:21	WESTERN 1:2	work 8:21	Zoom 3:21
want 20:23	96:19	what's 91:25	9:24 10:1 41:2 85:8	200m J. Z.1
27:12,16	105:6 121:2	wife 9:16,22 wife's 9:17	88:15 89:8	0
27:12,10	121:2 we're8:1	wire's 9:1/ winding	103:11	002159 76:10
41:9 45:18	25:19 29:4	120:19	worked 13:2	00251966:5
48:12	29:19 29:4	WITNES 82:24	14:18,22	76:18
51:12	36:10	witness 4:3	working	021103:18
54:18	40:24	7:12 21:11	18:19 20:9	03115 49:3
55:12 57:1	41:17	21:17	works 44:11	
58:21 59:5	49:11,23	22:19 23:5	87:23	1
64:20,21	50:8,16	25:12	wouldn't	1 5:5 21:21
78:16	59:8,9	27:25	85:8	77:8,11
80:19 97:5	61:14 69:3	28:18	wrong 14:16	1:27 125:2
97:10	77:5,6	29:24 34:3	76:19,21	10 99:5
104:1,20	119:18	37:18	76:19,21	10:052:12
109:23	121:7	38:11 48:6	/ 0 • 2 4	100 64:12
115:3	Weiner 3:9	48:19	X	100-percent
	TOLLIGE J. J	10.10		•
	I	I	1	I

Page	Line	
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PITTSBURGH, PA
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STATE COLLEGE, PA
PHILADELPHIA, PA
WILKES-BARRE, PA



SARGENT'S COURT REPORTING SERVICE, INC.

210 MAIN STREET JOHNSTOWN, PA 15901 (814) 536-8908 OIL CITY, PA SOMERSET, PA CLEARFIELD, PA READING, PA WILLIAMSPORT, PA *CHARLESTON, WV* MORGANTOWN, WV HAGERSTOWN, MD PIKEVILLE, KY



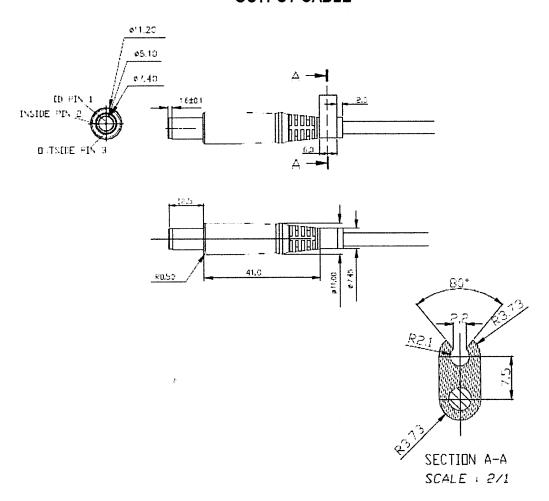
7.2. Input AC socket Type:

IEC 320 C6 Type

7.3. Output cable:

The output cable shall meet the electrical and MTBF requirements of this specification. The cable shall be UL wire style #1571, 2 X 16AWG and 1 X 24AWG. The connector shall be equivalent to FOXCONN JPD0038-506 and pin out as shown in Figure 1.

FIGURE 1 OUTPUT CABLE





Case 2:17-cv-00154-MRH Document 166-4 Filed 05/27/22 Page 139 of 158 **STL DCC 05/28/2015**

表單編號 Form No: DC-002EA

2.2 Rating

Item	Function	Specification	Remarks	
1.	Nominal Capacity	68Wh**	0.2C discharge rate at 25°C 3.0V/cell cut off, Standard charge	
2.	Minimum Capacity	66.7Wh**		
3.	Nominal Voltage	14.4V	ocv	
4.	Rated Charge Voltage	16.4V	CC-CV Mode	
5.	Maximum Charge Voltage	17.0V		
6.	End of Discharge Voltage	12.0V		
7.	Rated Charge Current	3,360mA	End of Charge Current≾240mA	
8.	Maximum Charge Current	3,800mA		
9.	Maximum Discharge current	7.7A(peak)	 ÷ at ambient temperature ≤ 40°C ÷ 88W(Continuous) 	
	Surge Current	30A	Duration Time < 0.8m Sec	
10.		50A	Duration Time< 0.6m Sec	
	Operation Allowable Temperature Range	0°C~45°C	Charge Initial Temperature	
		0°C~45°C	Continuous Charging	
11.		-10°C~60°C	For start of discharge below 0 C, The battery pack must have a charge ≥ 80%	
12.	Storage Temperature Range	-20~60°C: Max. 1 month -20~45°C: Max. 3 month -20~30°C: Max. 6 month	Each period shows 90% of initial discharge capacity can be assured after re-charged for shipping conditioned battery pack.	
13.	Allowable Humidity Range	ange 10~90% RH Operational		

^{**} Battery Pack should be firstly charged and discharged for 3 complete cycles as a warm-up before performance capacity test.

PLAINTIFF'S EXHIBIT

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Spec. No.	NBP8A82E2*	HP	Ver: 4.7	Spec. page	<u>8/28</u>

UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF PENNSYLVANIA

THOMAS POWER.

CIVIL DIVISION

Plaintiff,

Docket No.: 2:17-CV-00154-MRH

VS.

HEWLETT-PACKARD COMPANY.

Hon. Mark R. Hornak

Defendants.

Defendant HP, Inc. (named herein as Hewlett-Packard Company) makes this its answers to interrogatories. Based on a review of photographs, HP, Inc. believes it has identified the "at issue" artifact notebook computer in this case as an Elitebook Mobile WorkStation 8730w with a serial no. of CNU93328HY [hereinafter, the "at issue" artifact notebook will be referred to as the "Power Notebook."].

DEFENDANT'S ANSWERS TO PLAINTIFF'S INTERROGATORIES

1. Please state the full name, address, and title of any and all persons involved in answering these interrogatories.

ANSWER:

The Defendant objects to this interrogatory to the extent it seeks information protected by the attorney-client privilege and/or the work-product doctrine. Subject to and without waiving the foregoing objections, the answers to interrogatories will be signed on behalf of the Defendant by Ivar Cuellar in his capacity as Program Manager, Global Risk for HP, Inc.

Please state how you or your business is organized (e.g. corporation, partnership, non-profit organization, association, joint-venture, etc.) and provide information relating to any of your subsidiary, parent companies, or corporations, which, may be related to the herein litigation.

ANSWER:

The Defendant objects to this interrogatory on grounds it is overly broad, vague, not reasonably calculated to lead to the discovery of admissible evidence, seeks confidential and proprietary information, and seeks information not relevant to the claims and defenses of this case. Subject to and without waiving the foregoing objections, the Defendant states HP, Inc. is a corporation that was formed in or around November 1, 2015. The named defendant herein, Hewlett Packard Company no longer exists. However, HP, Inc. is its successor for purposes of the product at issue in this case.



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WARRANTIES

3. Please identify all warranties, express or implied, that were made in relation to the sale or contract to transfer or distribute the at issue laptop and laptop charger, and if the warranty or guarantee was not made in writing or was made orally, please give the names of all parties involved and a complete description of what was represented.

ANSWER:

Defendant objects to this interrogatory on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, the Defendant states that is has no warranty record for Richard Sanderson (the alleged eBay seller) and the Power Notebook and has no first-hand knowledge of what, if any, warranty that the eBay seller may have provided to plaintiff at the time of sale to him. Defendant refers plaintiff to eBay for any information it may have regarding the terms and conditions of the sale from Sanderson to him.

PRODUCT LITERATURE

4. Please identify any and every piece of product literature related to the at issue laptop, including but not limited to, brochures, manuals, safety manuals, training materials, warranties or guaranties, safety bulletins, published safety notices, and all documentation relating to modifications, aftermarket products, or accessories. If available, please provide copies of said documents.

ANSWER:

Defendant objects to this interrogatory on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, the Defendant states that it has no knowledge of what, if any, product literature, including but not limited to, brochures, manuals, safety manuals, training materials, warranties or guarantees, safety bulletins, published safety notices and documentation relating to modifications, aftermarket products, or accessories documents warranty that the eBay seller may have provided to plaintiff at the time of sale to him.

DESIGN, MANUFACTURE, AND TESTING

5. Please state the date on which a working prototype of the at issue laptop model first existed.

ANSWER:

Defendant objects to this interrogatory on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the

needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, the defendant states the Elitebook 8730w model was brought to market in or around August of 2008. The specific Power Notebook was manufactured on 8/18/09.

6. Please state the date on which the at issue laptop, lithium ion battery, laptop charger and power cord were designed, manufactured, assembled and tested.

ANSWER:

Defendant objects to this interrogatory on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, the Defendant states that the artifact battery pack retained in evidence from the Power Notebook was not the original battery pack shipped with it, is not an HP-approved battery pack and is of unknown origin. Therefore, Defendant does not know when it was manufactured, assembled, tested or by whom. The Defendant does not know whether the artifact adapter is original to the Power Notebook. The manufacture date for the Power Notebook was 8/18/09. The manufacture date for the components original to the Power Notebook when it shipped from HP would have been: battery pack [week of 6/22/09]; adapter [week of 7/27/09]. Defendant states that each Elitebook 8730w notebook was subject to function and run-in testing after it was assembled and before it was shipped. Therefore, the Power Notebook would have been subject to function and run-in testing including both human and automated testing of its systems on or around 8/18/09. The particular component parts (lithium ion batteries, charger) would have been tested by their respective manufacturer/suppliers before being shipped for inclusion in the Power Notebook. In addition, Defendant states that the Elitebook 8730w and component parts thereof were subject to testing done to qualify for UL listing and CB certification.

7. Please state the name, home and business address of an individual, business, firm, or other organization that was in any way responsible for the design, manufacture, fabrication, testing, and/or quality control of the at issue laptop, lithium ion battery, laptop charger, power cord and any similar laptop models.

ANSWER:

Please see answer/objections #6 incorporated herein by reference. Further answering, Defendant states that the Power Notebook was assembled on behalf of the Defendant by Inventec Corporation incorporating component parts designed and manufactured by other entities including the original battery pack from STL Technology Co. Ltd. with Sony cells and an A/C adapter from Hipro Electronics Co. Ltd. Defendant states that the artifact battery pack retained in evidence from the Power Notebook is not the original battery pack, is not an HP-approved battery pack and is of unknown origin to Defendant.

8. Please identify and describe in detail any and every test or inspection that was performed on the at issue laptop, lithium ion battery, laptop charger, component parts, and similar models of laptops <u>prior to</u> the at issue incident. Please provide the results of these tests and inspections if they exist.

ANSWER:

Please see answer/objections #6 incorporated herein by reference. Defendant states that the artifact battery pack retained in evidence from the Power Notebook is not the original battery pack, is not an HP-approved battery pack and is of unknown origin to HP and, therefore, Defendant does not know when it was tested or by whom.

 Please identify and describe in detail the production, manufacturing, fabrication or assembly processes involved in creating the at issue laptop, lithium ion battery, charger and power cord.

ANSWER:

Defendant objects to this interrogatory on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, Defendant states that the Power Notebook was assembled on behalf of the Defendant by Inventec Corporation on or about August 18, 2009 originally incorporating component parts designed and manufactured by other entities including a battery pack from STL Technology Co. Ltd. with Sony cells and an A/C adapter from Hipro Electronics Co. Ltd. Defendant states that the artifact battery pack retained in evidence from the Power Notebook is not the original battery pack that would have shipped with it, is not a HP-approved battery pack and is of unknown origin to Defendant.

10. Please identify all suppliers and manufacturers of all original equipment suppliers of lithium ion laptop batteries, chargers and power cords defendant Hewlett-Packard used in and/or old with any and all of its laptops produced between January 1, 2005 through December 31, 2005.

ANSWER:

Defendant objects to this interrogatory on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, the Defendant states that vendor for the applicable component parts original to the Power Notebook were:

- 1. Battery Pack/Cells; STL Technology Co. Ltd/Sony
- 2. Power Adapter: Hipro Electronics Co. Ltd

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Further answering, Defendant states that the supplier name of other component parts original to the Power Notebook are set forth in the attached Exhibit A.

11. Please state the name, home, business address of each and every original equipment supplier and manufacturer of the at issue laptop, lithium ion battery, charger and power cord, and indicate the supplier and manufacture's relationship(s) to defendant Hewlett-Packard Company.

ANSWER:

Please see answer/objections #10 incorporated herein by reference.

11. Please provide a detailed list of any and all parts you obtained from the manufacturers and suppliers identified in Interrogatories Nos. 7 through 11 from January 1, 2005 through December 31, 2005.

ANSWER:

Please see answer/objections #10 incorporated herein by reference.

12. Please provide a detailed list of any parts you obtained from the manufacturers and suppliers identified in your answer to Interrogatories Nos. 7 through 11 lithium ion laptop batteries, power cords, chargers and/or component parts from January 1, 2005 through December 31, 2005.

ANSWER:

Please see answer/objections #10 incorporated herein by reference.

13. Please describe in detail the chemicals contained within the lithium ion battery(ies) used in the at issue laptop, whether those chemicals are normally contained in lithium batteries used in your laptops and other similar laptop models.

ANSWER:

Defendant objects to this interrogatory on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, Defendant states that the artifact battery pack retained in evidence from the Power Notebook was an after-market battery pack of unknown origin. Thus, Defendant has no knowledge of what chemicals were contained in it.

14. Please describe in detail any design and safety features built into the at-issue laptop to prevent overheating, explosions, and fires.

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ANSWER:

Defendant objects to this interrogatory on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, features of the Elitebook 8730w including the Power Notebook when it was originally shipped from HP include, but are not limited to, current limiting features (including those for secondary power supplies on the system board), the battery pack, and the A/C adapter which would have shipped with any Elitebook 8730w from HP. In addition, computer software logic in both the Elitebook 8730w's CPU and in the battery pack which would have shipped with it monitor and control the battery charge and discharge processes to ensure these occur at safe temperatures and voltages. The Elitebook 8730w furthermore includes multiple safety features to monitor its temperature and prevent it from operating at a temperature outside the allowable parameters. Multiple thermal sensors located inside and outside the CPU detect and measure the CPU temperature. If the CPU temperature rises, an embedded controller will cause the fan to increase speed to cool the system. If the CPU temperature continues to rise and the fan has reached its highest speed, an operating system-based mechanism called passive throttling will occur to slow the CPU, thereby reducing the temperature of the CPU. A second, independent mechanism called Hardware Thermal Control will also cause the CPU to slow, even in the event the fan and passive throttling mechanism are non-functional. An operating system-based "critical shutdown" function will cause the system to turn off even in the event the aforementioned safety features are nonfunctional. Two additional levels of hardware protection inside the processor include a "Thermtrip" mechanism and an internal sensor on the CPU's internal thermal sensor, either of which will shut off the main power supply in the event they are tripped. The Elitebook's housing is also made of UL 94 V-0 rated plastic which is self-extinguishing and will not sustain combustion.

Further answering, the Elitebook 8730w shipped with a battery pack which contains design features to monitor and control temperature, voltage and current to ensure the lithium-ion battery cells charge and discharge within safe ranges. The original battery pack furthermore contains a single-use fuse causing a shut down in the event of variation between individual cell charge states or an overvoltage condition.

The lithium ion battery cells contained in the battery pack which would have shipped with the Elitebook 8730w are equipped with safety design features, including a positive temperature coefficient device and a current interrupt device. In addition, HP tests lithium ion battery cells by overcharging cells at various voltages to ensure they fail safely and in a benign manner. Only cells which pass inspection are placed on an Approved Vendor List enabling a battery pack manufacturer to use the cells.

15. Please identify any and all laws, rules, regulations, standards, statutes, ordinances, recommendations, or other requirements establishes by any local, state or federal government body or officer, whether legislative, executive, or administrative in character,

which deal with, define, limit, or specify the design, manufacture, composition, distribution, and /or use of the at issue product or similar products.

ANSWER:

Defendant objects to this interrogatory on grounds it seeks disclosure of information subject to attorney-client privilege, seeks a legal conclusion, is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is limitless in its application and, as such, is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits.

RECALLS

16. Please state whether you were aware of any mandatory or voluntary recalls, warnings, or recommendations to modify or repair the at issue laptop, lithium ion battery, charger, and any of their component parts, or similar products, for the ten (10) years preceding this incident. If so, please describe each in detail and provide copies of relevant documentation.

ANSWER:

Defendant objects to this interrogatory on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, the Defendant states that the Elitebook Mobile WorkStation 8730w has not been subject to recall. Further answering, recalls related to other HP products or component parts thereof can be found on the website for the Consumer Product Safety Commission. As Defendant has previously disclosed to plaintiff, the artifact battery pack retained in evidence from the Power Notebook was an after-market battery pack of unknown origin. Thus, Defendant has no knowledge of whether it (or the cells therein) have been subject to recall.

17. Please state whether you ever issued or distributed any mandatory or voluntary recalls, warnings, or recommendations to modify or repair the at issue laptop or similar laptop models that use a lithium ion battery and charger products. If so, please describe each event or recall in detail, and provide all relevant documentation.

ANSWER: Please see answer #16 incorporated herein by reference.

18. Please state whether you have been involved in any lawsuits or litigation relating to similar events or alleged defects regarding the at issue product or similar products over the past ten (10) years.

ANSWER:

Defendant objects to this interrogatory on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, the Defendant states that it is not aware of other lawsuits in the United States where it has been alleged that an Elitebook 8730w had caused a fire or caused personal injury by fire/burning.

REPORTS

19. Have you prepared any reports regarding the incident alleged in plaintiffs Complaint? If so, please provide the names of the persons or entities who prepared these reports, the dates of their creation, and please attach a copy of said reports hereto.

ANSWER:

Defendant objects to this interrogatory on grounds it seeks disclosure of information subject to attorney-client privilege, seeks a legal conclusion, is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, Defendant refers to the report from plaintiff related to this incident attached hereto as Exhibit B.

20. Please identify any plans, drawings, maps, photographs, films, schematic diagrams, electrical schematics, charts, graphs, recordings or any other writings related to this case or the at issue laptop. Please attach copies of the requested documentation.

ANSWER:

Defendant objects to this interrogatory on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, the Defendant refers to its initial disclosure documents HP000001 – HP001494. Defendant further states that photographs, x-rays and a video from the examination of the battery pack from the "at issue" notebook computer have already been produced to plaintiff.

POST-INCIDENT ALTERATIONS

21. Please state whether you in any way changed the design, construction, manufacturing process, or materials used in the production process of the at issue laptop, lithium ion battery, and/or charger at any time after the incident described in the plaintiffs Complaint.

If so, please describe these changes with specificity and attach all relevant documentation.

ANSWER:

Defendant objects to this interrogatory on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, the Defendant states it did not make any changes to the Elitebook 8730w or any component part thereof related to the incident in plaintiff's complaint or any other incidents.

WITNESS AND STATEMENTS

22. Please indicate whether you or any of your representatives have had any conversations with anyone having information relative to any of plaintiff's claims or the incident giving rise to this lawsuit. If so, please describe in detail and attach a copy of any notes, recordings, or compilations relating thereto.

ANSWER:

Defendant objects to this interrogatory on grounds it seeks information protected by attorney-client privilege and/or the work product doctrine, on grounds it is not reasonably calculated to lead to the discovery of admissible evidence, is overly broad, unduly vague and is not proportional to the needs of this case in light of the amount in controversy, the importance of this discovery in resolving the issues and the burden and expense of such discovery outweighs its likely benefits. Subject to and without waiving the foregoing objections, please see Exhibit B attached hereto.

23. Please identify any and every person you intend to call as an expert witness at trial m this case. Additionally, please provide their names, addresses, telephone numbers; the substance or facts to which they will testify or opine; the grounds for their opinions; any tests they performed or will rely upon; the backgrounds or areas of specialization of each expert; and the CV or other qualifications of each expert.

ANSWER:

The Defendant objects to this interrogatory on grounds it seeks information protected by attorney-client privilege and/or the work product doctrine, and seeks disclosure of expert information prior to the deadlines set by the Court's scheduling order(s). Subject to and without waiving the foregoing objections, the Defendant states that it will disclose the requested information pertaining to experts it expects to testify in conformity with the Federal Rules of Civil Procedure and the Court's order(s) on expert disclosure.

24. Do you contend that the negligence or fault of another person or party to this action caused or contributed to the ultimate harm alleged by plaintiff? If so, please describe your assertions in detail:

ANSWER:

The Defendant objects to this interrogatory on grounds it seeks information protected by attorney-client privilege and/or the work product doctrine, and seeks disclosure of expert information prior to the deadlines set by the Court's scheduling order(s). Subject to and without waiving the foregoing objections, the Defendant states that it is has no warranty record of Richard Sanderson (the purported seller of the "at issue laptop" to plaintiff) owning an Elitebook 8730w and, as such, has no first-hand knowledge regarding the alleged seller of the Power Notebook or what might have been done to the Power Notebook by him or before he owned it. Defendant has confirmed that the artifact battery pack retained in evidence from the Power Notebook was an after-market battery pack of unknown origin. Thus, if, as alleged, the battery pack malfunctioned and caused an injury to the plaintiff such would presumably be the fault of the parties responsible for the design, manufacture, sale and distribution of that battery pack. Defendant was not present at the time of the alleged incident and, therefore, does not have first-hand knowledge regarding whether the incident occurred, how it occurred and how plaintiff was using the Power Notebook at the time of the incident. Discovery is on-going and Defendant reserves the right to supplement this answer.

The undersigned deposes and states under penalties of perjury, on this day of January, 2018, I am the Program Manager, Global Risk Management with HP Inc., named herein as defendant Hewlett Packard Company in the above-captioned action. I have read the foregoing answers to interrogatories and know the contents thereof; that these answers were prepared with the assistance of counsel upon whose advice I have relied; that the answers set forth herein, subject to inadvertent or undiscoverable errors, are not all within my personal knowledge and there is no employee of HP Inc. f/k/a Hewlett-Packard Co. who has knowledge of all such matters; that the answers herein are based on and are, therefore, necessarily limited by records in and information still in existence, presently recollected and thus far discovered in the course of preparation of these answers; that I reserve the right to supplement or make any changes in the answers if it appears at any time that omissions or errors have been made or that more accurate information is available; that subject to the limitations set forth herein these answers are true to the best of my knowledge, information and belief.

HP, Inc. named herein as

HEWLETT-PACKARD COMPANY

Ivar Cuellar

Its: Program Manager, HP Inc.

As to objections.

Michael Weiner, Esq.

Bennett Bricklin & Saltzburg LLC

707 Grant Street

Suite 1800

Pittsburgh, PA 15219

(412) 894-4101

neiger@blodgs.com

EXHIBIT A

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EXHIBIT B

Incident Information

Incklent Number:

134076

Status:

Unit Requested

Incident Created;

Aug 18, 2016

Originator Information

Name:

John Camparone

Source:

Other

Email:

iolin.camparone@hp.com

Call center ID:

Customer Information

Name:

Thomas Power

Phone:

412-733-8487

Email:

powerx1@email.com

Incident Date:

Aug 18, 2016

Address:

424 Carothers Avenue

Apt 5

Camegie, PA 15116

Country:

UNITED STATES

Region:

NORTH AMERICA

Product Information

Product Name:

HP EliteBook 8730w Mobile Workstation

Product Number:

SF114UP

Serial Number:

Illegible

Product Line:

TA

Personal Injury:

Yes

Property Damage: Claim Against HP:

No

Customer

Statement:

"While using this computer, an explosion and thre burst out of the bottom causing 1st, 2nd, and 3rd degree burns to both of my legs resulting in a 20 day

hospitalization. The cause may have been the power cord, the computer, the

battery, or some combination of all."

Description of Product Setup:

On customer's lap, AC power attached.

Description of

Product

In customer home.

Environment:

Unknown

Description of Weather at the Time of the Incident:

Additional Notes:

Customer indicated he has retained an attorney and is not able to send the taptop

to HP at this time. Note that the p/n listed is a representative p/n; unable to determine correct p/n due to extensive damage to laptop. Pictures have been

provided.

Analysis Information

Bom on Date:

Tear Down Date:

Site Received

Date:

Tear Down Team:

Rog Model No:

HSTNN-143C

Page Count:

Picture Count

Flash Count:

Ballery Charge Cycle Count:

Firmware Rev. No:

Unexpected Findings:

No

Ballery Returned:

Pens Returned:

Power Supply:

Power Supply Specs:

Power Cord:

Justification:

Based on the documented symptoms, this incident qualifies for review. Please

have unit captured for evaluation.

Observations:

Paul C. 8/19/2016

Attached pictures show the following: - AC adapter label: CT# 5979c0cymv808x

D cover with severely damaged battery pack, one cell visible
 A cover with large black trace starting from the battery pack location
 AC adapter with DC cord insulator partially melted

Safety Comments:

Affected Parts:

Conclusions:

Next Steps:

Additional Comments

Incident Summary

Incident Information

UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF PENNSYLVANIA

THOMAS POWER,

CIVIL DIVISION

Plaintiff.

Docket No.: 2:17-CV-00154-MRH

VS.

Hon. Mark R. Hornak

HEWLETT-PACKARD COMPANY,

Defendants.

AMENDED NOTICE OF DEPOSITION PURSUANT TO FED. R. CIV. P. 30(B)(6)

TO: COUNSEL FOR DEFENDANT
Michael A. Weiner, Esquire
Bennett, Bricklin & Saltzburg LLC
707 Grant Street, Suite 1800
Pittsburgh, PA 15219
weiner@bbs-law.com

PLEASE TAKE NOTICE that, pursuant to Fed. R. Civ. P. 30(b)(6), Plaintiff will take the depositions upon oral examination, to be recorded by stenographic means and/or videotape, at the offices of the Law Offices of Friday & Cox LLC, 1405 McFarland Road, Pittsburgh, PA 15216, of HP, Inc. (named in Plaintiff's Complaint as Hewlett-Packard Company and hereinafter "HPI"). HPI is requested to designate the person or persons most knowledgeable and prepared to testify on behalf of HPI concerning the subject matter described in **Exhibit A**, attached hereto. The deposition(s) will commence at 10:00 a.m. on November 27, 2018. If necessary, each deposition will be adjourned until completed.

Dated: November 21, 2018

Respectfully submitted,

FRIDAY & COX LLC

/s/ Peter D. Friday
Peter D. Friday, Esquire
Pa. I.D. # 48746
pfriday@fridaylaw.com



Jesse A. Drumm, Esquire Pa. I.D. # 319471 jdrumm@fridaylaw.com

Josh S. Licata, Esquire Pa. I.D. # 318783 jlicata@fridaylaw.com

Friday & Cox LLC 1405 McFarland Road Pittsburgh, PA 15216 Tele: (412) 561-4290 Fax: (412) 561-4291

Attorneys for Plaintiff

EXHIBIT A

The "subject laptop" shall refer to the HP EliteBook Mobile Workstation, model number HP8730w identified in Plaintiff's Complaint filed in the above-captioned matter.

At the time of the deposition, the Corporate Designee is to testify to the following matters known or reasonably available to Defendant:

- 1. The design of the subject laptop
- 2. The battery pack and cells sold with the subject laptop
- 3. Battery packs and cells approved for use in the subject laptop
- 4. The power adapter sold with the subject laptop
- 5. Power adapters approved for use in the subject laptop
- 6. How HP, Inc. determined the artifact battery pack was not original to the subject laptop
- 7. Warnings provided with the subject laptop
- 8. Safety features of the subject laptop related to heat protection
- 9. Safety Testing of the subject laptop
- 10. Safety testing of component parts in the subject laptop
- 11. The identity of non-HP entities involved in the design and manufacture of the subject laptop
- 12. Any non-privileged investigation into the incident alleged in the Plaintiff's Complaint
- 13. Information contained in HP, Inc.'s answers to interrogatories
- 14. Recalls of the subject laptop or component parts sold therewith
- 15. Safety features of the subject laptop related to battery charging
- 16. Safety testing of the subject laptop battery pack and cells